



TAXATION PROGRAMME EXAMINATIONS

CERTIFICATE LEVEL

---

C1: BUSINESS MANAGEMENT

---

MONDAY 13 DECEMBER 2021

---

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 question paper consists of FIVE (5) questions of twenty (20) marks each. You MUST attempt all the FIVE (5) 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. 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.
6. All workings must be done in the answer booklet.
7. Present legible and tidy work.
8. 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.**

**Attempt all five (5) questions.**

**QUESTION ONE**

- (a) Explain the four (4) benefits of stakeholder management to the company. (4 marks)
- (b) Suggest any four (4) issues on how managers must manage the stakeholder relationships. (4 marks)
- (c) With the AID of the diagram, illustrate the factors affecting managerial ethical behavior. (12 marks)

**[Total: 20 Marks]**

**QUESTION TWO**

- (a) Define corporate governance. (6 marks)
- (b) List four (4) reasons why selection of candidate may be ineffective (8 marks)
- (c) Explain the benefits of planning. (6 marks)

**[Total: 20 Marks]**

**QUESTION THREE**

- (a) Outline the five (5) functions a Manager is expected to perform in a business organization. (10 marks)
- (b) Define the concept of marketing (2 marks)
- (c) Describe the market research process that need to be undertaken before a product is launched. (8 marks)

**[Total: 20 Marks]**

**QUESTION FOUR**

- (a) Explain the four (4) characteristics of an organization. (8 marks)
- (b) Define divisional form of organizational structures. (4 marks)
- (c) Give four (4) examples of divisional structures. (8 marks)

**[Total: 20 Marks]**

### **QUESTION FIVE**

- (a) It is very important that managers should be reminded of their responsibilities all the time in order for companies to develop. Remind Managers about the six (6) components of strategic leadership by Abdalla Hag. (12 marks)
- (b) Define the three (3) major types of controls used in organizations. (6 marks)
- (c) What are the two (2) Purposes of Performance Appraisal? (2 marks)

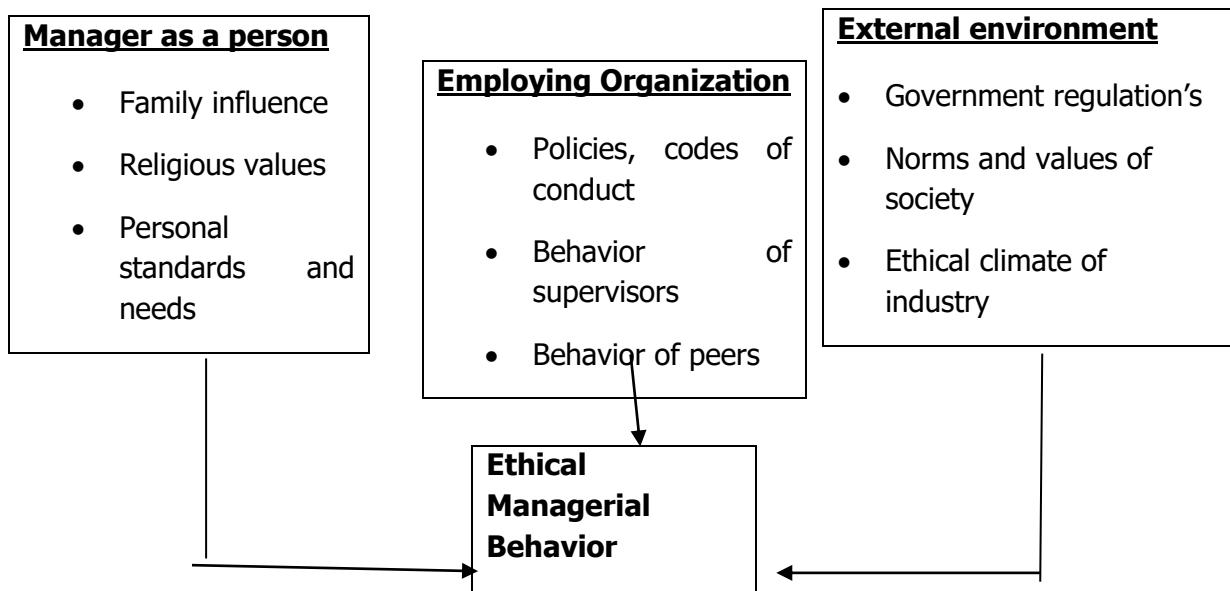
**[Total: 20 Marks]**

**END OF PAPER**

## C1: BUSINESS MANAGEMENT SUGGESTED SOLUTIONS

### SOLUTION ONE

- (a) The following are the four (4) benefits of stakeholder management to the company.
- It can lead to other favorable organizational outcomes such as improved predictability of environmental changes.
  - More successful innovation
  - Greater degrees of confidence among stakeholders.
  - Greater organizational flexibility to cushion the impact of change, it will improve the business relationship with customers.
- (b) The following are the suggestions on how managers must manage the stakeholder relations.
- Identifying the organization stakeholders and how they are affected by the company's decision and which ones will influence the company's decisions.
  - Determine what particular interest or concerns the stakeholders might have e.g. concerning product quality, financial issues, environmental production.
  - Managers must decide how critical each stakeholder is to the organization's decisions and actions.
  - Determine what specific approach to use to manage the stakeholder's relationship.
- (c) the following are the factors affecting managerial ethics.



## **SOLUTION TWO**

(a) The following is the definition and explanation of corporate governance.

- The system of governing an organization so that the interests of corporate owners are protected
- The system of control and performance monitoring of top management
- The system used to govern a corporation so that the interests of corporate owners are protected

(b) The following are reasons why selection may be ineffective:

- Poorly designed application forms
- Using selection devices that are inappropriate or not valid or reliable
- Using untrained hiring personnel
- Lack of periodic review of the whole selection process by management to gauge the robustness of the process

(c) the following are the benefits of planning:

- Focus and flexibility it encourages dynamism and a sense of the future
- Improved coordination
- Better control
- Provides a guide for action
- Improves resource mobilization
- Provides motivation and commitment.

## **SOLUTION THREE**

### **(a) Five functions a manager is expected to perform in an organization**

**are:**

- (i) **Planning:** this is the process of setting up objectives and how they will be achieved by the organisation. Planning is done at three management levels which lower, middle and top. Planning is done by taking into consideration both the internal and external business environment.
- (ii) **Organising:** A manager arranges and allocates work, authority and resources available to organisation members in order to achieve the goals. This is done through an organizational structure.
- (iii) **Cordination.** The manager integrates individuals, groups and departments efforts towards the achievement of organizational goals.
- (iv) **Leading:** The manager must have the power to influence the subordinates behavior to carry out tasks and achieve them. He/She must work through employees by creating a conducive working environment that motivates them.
- (v) **Controlling:** A manager must compare planned activities against actual results and take corrective actions where necessary. Planned objectives are compared against performed activities.

**(b)** Marketing is the activity set of institutions and processes for creating, communicating delivering and exchanging offerings that have value for customers, clients, partners and society at large.

### **(c) Marketing research process**

- (i) Defining the problem and research objectives: The research problem must be carefully defined in order to yield positive results. The research objectives could be based on exploratory, descriptive or casual research.
- (ii) Developing the research plan: A decision is made either to gather primary or secondary data. This data can be collected through observation, surveys, personal interviews, questionnaires etc.
- (iii) Implementing research plan: this is done by collecting, processing and analyzing data.
- (iv) Interpreting and reporting the findings: Data collected is interpreted into meaningful information, conclusion drawn and a report generated to be presented to management for decision making.

## **SOLUTION FOUR**

(a) The following are the characteristics of an organization:

1. People- they combine the effort of many to accomplish more than one can
2. Division of labor- specific tasks are divided and given to different people to help develop skill and expertise
3. Coordination- to ensure that people work together to get high level of accomplishment
4. Organizational purpose- the sense of mission which should be clear to all members and relevant outsiders and define the role of the organization.

(b) Divisional structures.

These are the structures that group together people with diverse skills and tasks but who work on the same product similar customer or clients.

(c) The following are the four (4) examples of divisional structures:

- Product structure group working on a single product or service
- Geographical structure or area structure, groups, jobs and actions being performed in the same location.
- Customer structures, group jobs and activities working on a single product or service.
- Time structures, group jobs and actions that are performed on the same work shift, for example hospital, leisure facilities.

## **SOLUTION FIVE**

(a)

- Determine strategic direction.
- Develop human capital.
- Exploiting and maintain core competences.
- Sustain an effective corporate culture.
- Emphasizing ethical practices by engaging in legally and morally defensible behavior.
- Establish strategic control to maintain vision.

(b) The following are the three (3) types of controls in the organization:

- Preliminary or feed forward Control-Make sure the proper direction is set and all the right resources are available to accomplish them.
- Concurrent Control-Focus on what happens during the work process – monitor ongoing operations and actions to make sure things are done correctly
- Post action Controls-Controls done after an action is completed focus on end results as opposed to inputs and actions.

(c) The purposes of performance appraisal are:

Evaluation-letting people know where they stand relative to objectives and standards

Development- assist the training and personal development of people. it focuses on future PERFORMANCE and the clarification of success standards and is a way of discovering performance obstacles and identifying training and development opportunities.

**END OF SOLUTIONS**





TAXATION PROGRAMME EXAMINATIONS

---

CERTIFICATE LEVEL

---

C2: ECONOMICS & FINANCIAL MATHEMATICS

---

WEDNESDAY 15 DECEMBER 2021

---

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 question paper consists of FIVE (5) questions of twenty (20) marks each. You MUST attempt all the FIVE (5) questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Formulae are provided in a separate booklet.
10. Graph paper (if required) is provided at the end of the answer booklet.

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

**Attempt all five (5) questions**

**QUESTION ONE**

- (a) State and elaborate any four (4) functions of the Bank of Zambia according to the Bank of Zambia Act of 1996. (8 marks)
- (b) State and explain any four (4) determinants of consumption. (8 marks)
- (c) Define marginal propensity to consume from the consumption function. (4 marks)

**[Total: 20 Marks]**

**QUESTION TWO**

The possible gains from trade are greatly exaggerated. If a country's exports and imports are equal, it means that it is exchanging with the rest of the world goods of equal market value. A country can only gain if her imports are more than exports.

**Required:**

- (a) Explain using the theories below, how a country can gain from free international trade.
- (i) Absolute Advantage (3 marks)
  - (ii) Comparative Advantage (3 marks)
- (b) If there are gains from free international trade, use any three (3) reasons to explain why countries may impose trade barriers. (6 marks)
- (c) Explain how the depreciation of the Kwacha against the US dollar affects Zambia's Imports. (4 marks)
- (d) Outline any two (2) items that are recorded under 'invisible trade' in the BoP. (4 marks)

**[Total: 20 Marks]**

**QUESTION THREE**

- (a) State what is meant by the following terms:
- (i) Xtrapolation (1 mark)
  - (ii) Interpolation (1 mark)
- (b) Mr. Mubita is a farmer and he owns cows at his farm. Each of his ten (10) cows was given an additive ( $x$ ) every day for four (4) weeks to see if it would improve their milk yield( $y$ ). At the beginning the average milk yield per day was four (4) gallons. The milk yield of each cow was measured on the last day of the four (4) weeks.

The data collected is shown in the table below:

Cow	A	B	C	D	E	F	G	H	I	J
Additive, $x$ , (25gm units)	1	2	3	4	5	6	7	8	9	10
Yield, $y$ , (gallons)	4.0	4.2	4.3	4.5	4.5	4.7	5.2	5.2	5.1	5.1

**Required:**

- (i) Calculate the correlation coefficient. (4 marks)
- (ii) Find the equation of the regression line. (3 marks)
- (iii) What practical use could be made of this equation in (ii) above? (2 marks)
- (iv) Calculate the value of the coefficient of determination and interpret its value. (2 marks)

(c) Kasongo wants to buy a new computer for K8,000 two (2) years from now. If she can earn 8% on her money, how much money should she put set aside today in order to make the payment when due in two years' time? (3 marks)

(d) Mr. Phiri wants to purchase a car. He is scheduled to make three annual instalments of K4,000 per year. Given a rate of interest of 10%, what is the price he is going to pay for the car (i.e. what is the present value)? (4 marks)

**[Total: 20 Marks]**

**QUESTION FOUR**

(a) A mortgage of K4,000,000 is to be paid over a 25 year period at a fixed interest rate of 4.5%. Calculate the monthly repayments. (6 marks)

(b) In an Accountants survey of senior executives, 30% of the senior executives said that it is appropriate for job candidates to ask about compensation and benefits during the first interview. Suppose that this result holds true for the current population of senior executives in Zambia. A random sample of six (6) senior executives is selected.

**Required:**

Find the probability that:

- (i) Exactly three senior executives in this sample hold the said opinion. (2 marks)
- (ii) At most two senior executives in this sample hold the said opinion. (4 marks)

- (iii) At least three senior executives in this sample hold the said opinion. (5 marks)
- (iv) One to three senior executives in this sample hold the said opinion. (3 marks)

**[Total: 20 Marks]**

**QUESTION FIVE**

- (a) Define the following terms:
  - (i) Effective annual interest rate (1 mark)
  - (ii) Annual percentage rate (1 mark)
  - (iii) Nominal interest rate (1 mark)
- (b) Given a monthly interest rate of 1%,
  - (i) What is the annual percentage rate? (2 marks)
  - (ii) What is the effective annual rate? (2 marks)
- (c) Mr. Kombe wants to create an endowment, which pays K100,000 per year, forever.
  - (i) How much money must be set aside today if the rate of interest is 10%? (2 marks)
  - (ii) If the first perpetuity payment will not be received until three (3) years from today, how much money needs to be set aside today? (3 marks)
- (d) Consider the following zero-coupon curve:

<b>Maturity (Years)</b>	<b>Zero – Coupon Rate (%)</b>
1	4.00
2	4.50
3	4.75
4	4.90
5	5.00

**Required:**

What is the price of a 5-year bond with a K100 face value, which delivers a 5% annual coupon rate? (3 marks)

(e) Calculate the net present value of a project which requires an initial investment of K243,000 and it is expected to generate a net cash flow of K50,000 each month for 12 months. Assume that the salvage value of the project is zero. The target rate of return is 12% per annum. (5 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## C2: ECONOMICS & FINANCIAL MATHEMATICS SUGGESTED SOLUTIONS

### SOLUTION ONE

(a) The following are the functions of the Bank of Zambia according to the Bank of Zambia Act of 1996:

- To license, supervise and regulate the activities of banks and financial institutions so as to promote the safe, sound and efficient operations and development of the financial system
- To promote efficient payment mechanism
- To issue notes and coins to be legal tender in the Republic and regulate all matters relating to the currency of the Republic
- To act as banker and fiscal agent to the Republic
- To support the efficient operation of the exchange systems
- To Act as advisor to the government on matters relating to economic and monetary management.

(b) Factors that affect consumption include:

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

(c) The following is the difference between personal income and disposable income:

- Personal income is the income actually received by persons from all sources in the form of current transfer payments and factor income.
- Disposable income is the income remaining with individuals after deduction of all taxes levied against their income and their property by the government.

## SOLUTION TWO

(a) Gains from trade

- (i) **Absolute advantage:** a country has an absolute advantage in the good it can produce using fewer resources than its trading partner. Both countries can gain from trade by specialising in the production of goods of their absolute advantage and the exchange part of it.
- (ii) **Comparative advantage:** a country has comparative advantage in the production of a good at a lower opportunity cost than its trading partner. Both countries can gain by specialising in the production of those goods in which they have a comparative advantage and then exchange part of it.

(b) Barriers to trade

- To protect local infant industries from stiff competition from well-established firms from other countries.
- To prevent or counter dumping.
- To protect home employment.
- To correct balance of payment deficit.
- To retaliate.

(c) When the kwacha depreciates against the US dollar, Zambia's imports which are mainly priced in US\$ become more expensive to Zambian importers. Therefore, a depreciation of the kwacha discourages imports

(d) Invisible trade is trade in services. Examples include;

Imports and/exports of;

- Banking services
- Transport services
- Educational services
- Tourism
- Health care services



### SOLUTION THREE

(a)

- i. Extrapolation is statistical technique aimed at predicting the future data by relying on historical data.
- ii. Interpolation is a statistical technique aimed at reading off the values in between the recorded data.

(b)

(i)

Cow	$x$	$y$	$xy$	$x^2$	$y^2$
A	1	4.0	4.0	1	16.00
B	2	4.2	8.4	4	17.64
C	3	4.3	12.9	9	18.49
D	4	4.5	18.0	16	20.25
E	5	4.5	22.5	25	20.25
F	6	4.7	28.2	36	22.09
G	7	5.2	36.4	49	27.04
H	8	5.2	41.6	64	27.04
I	9	5.1	45.9	81	26.01
J	10	5.1	51.0	100	26.01
Sum	$\sum x = 55$	$\sum y = 46.8$	$\sum xy = 268.9$	$\sum x^2 = 385$	$\sum y^2 = 220.82$

$$\bar{x} = \frac{\sum x}{n} = \frac{55}{10} = 5.5; \quad \bar{y} = \frac{\sum y}{n} = \frac{46.8}{10} = 4.68$$

$$SS_{xx} = \sum x^2 - \frac{(\sum x)^2}{n} = 385 - \frac{(55)^2}{10} = 82.5$$

$$SS_{xy} = \sum xy - \frac{(\sum x)(\sum y)}{n} = 268.9 - \frac{(55)(46.8)}{10} = 11.5$$

$$SS_{yy} = \sum y^2 - \frac{(\sum y)^2}{n} = 220.82 - \frac{(46.8)^2}{10} = 1.796$$

Therefore, correlation coefficient is:

$$r = \frac{SS_{xy}}{\sqrt{SS_{xx}SS_{yy}}} = \frac{11.5}{\sqrt{82.5 \times 1.796}} = 0.945$$

$$(ii) \quad \hat{\beta}_1 = \frac{SS_{xy}}{SS_{xx}} = \frac{11.5}{82.5} = 0.14$$

$$\beta_0 = \bar{y} - \hat{\beta}_1 \bar{x} = 4.68 - 0.14(5.5) = 3.91$$

Therefore, the regression line is given by

$$\hat{y} = \hat{\beta}_0 + \hat{\beta}_1 x$$

$$\hat{y} = 3.91 + 0.14x$$

(iii) This is a prediction equation. The practical use of this equation in this problem is that it can be used to predict or estimate the milk yield given any value of additives. In other words, it can be used to predict the gross milk yield or determine whether additives improve milk yield in cows.

$$(iv) \quad r^2 = 0.945^2 = 0.89$$

**Interpretation:**

89% of variation in the milk yield can be attributed to the additives.

$r^2$  is called the coefficient of determination.

$$(c) \quad PV = \frac{\text{Future value after } t \text{ periods}}{(1+r)^t}$$

$$= \frac{8000}{(1.08)^2} = \text{K}6,858.71$$

(d) Present Value Annuity Factor (PVAF). The present value of K1 a year for each of t years.

$$PVAF = \left[ \frac{1}{r} - \frac{1}{r(1+r)^t} \right]$$

$$= 4,000 \left[ \frac{1}{0.1} - \frac{1}{0.1(1+0.1)^3} \right] = \text{K}9,947.41$$

## SOLUTION FOUR

(a)

We have been given  $L = 4000000$ ,  $\frac{i}{12} = \frac{0.0045}{12} = 0.00375$  per month,  $t = 25 \times 12 = 300$  payments. Therefore, for monthly repayments we have:

$$A_0 = L \frac{i/12}{1 - \left(1 + \frac{i}{12}\right)^{-t \times 12}}$$

$$A_0 = 4000000 \times \frac{0.00375}{1 - (1.00375)^{-300}}$$

$$= 4000000 \times 0.0055583$$

$$= 22,233.2$$

Repayment per month will be

$$K22,233.2$$

(b)

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

Therefore, we have that;

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

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

$$P(X = 0) = \binom{6}{0} (0.3)^0 (1 - 0.3)^{6-0} = 0.1176$$

$$P(X = 1) = \binom{6}{1} (0.3)^1 (1 - 0.3)^{6-1} = 0.3025$$

$$P(X = 2) = \binom{6}{2} (0.3)^2 (1 - 0.3)^{6-2} = 0.3241$$

$$P(X = 3) = \binom{6}{3} (0.3)^3 (1 - 0.3)^{6-3} = 0.1852$$

$$P(X = 4) = \binom{6}{4} (0.3)^4 (1 - 0.3)^{6-4} = 0.0595$$

$$P(X = 5) = \binom{6}{5} (0.3)^5 (1 - 0.3)^{6-5} = 0.0102$$

$$P(X = 6) = \binom{6}{6} (0.3)^6 (1 - 0.3)^{6-6} = 0.0007$$

**i.**  $P(X = 3) = P(3) = 0.1852$

**ii.**  $P(X \leq 2) = P(0) + P(1) + P(2) = 0.1176 + 0.3025 + 0.3241 = 0.7442$

$$P(X \geq 3) = P(3) + P(4) + P(5) + P(6) = 0.1852 + 0.0595 + 0.0595 + 0.0007 =$$

**iii.** 0.2556

**iv.**  $P(1 \leq X \leq 3) = P(1) + P(2) + P(3) = 0.3025 + 0.3241 + 0.1852 = 0.8118$

## SOLUTION FIVE

(a)

- (i) Effective annual interest rate is the interest rate that is annualized using compound interest.
- (ii) Annual percentage rate is the interest rate that is annualized using simple interest.
- (iii) Nominal interest rate is the interest rate at which the money invested grows.

(b)

(i)  $APR = 0.01 \times 12 = 0.12$  or 12%

(ii)  $EAR = (1 + 0.01)^{12} - 1$   
 $= 0.1268$   
 $= 12.68\%$

(c)

(i) Here  $C = 100,000$  and  $r = 0.1$ . We have

$$PV = \frac{C}{r} = \frac{100,000}{0.1} = \text{K}1,000,000$$

(ii)  $PV = 100,000 \frac{1}{0.1} \frac{1}{(1+0.1)^3} = \text{K}751,315$

(d) The price  $P$  of the bond is equal to the sum of its discounted cash flows and is given by the following formula

$$P = \frac{5}{1+4\%} + \frac{5}{1+4.5\%} + \frac{5}{1+4.75\%} + \frac{5}{1+4.9\%} + \frac{105}{1+5\%} = \text{K}100.14$$

(e) We have

Initial Investment = K243,000

Net Cash Inflow per period = K50,000

Number of Periods = 12

Discount rate per period =  $12\% \div 12 = 1\%$

$$\begin{aligned} \text{Net Present Value} &= 50,000 \times \left[ 1 - (1 \div 1\%)^{-12} \right] \div 1\% - 243,000 \\ &= 50,000 \times (1 - 1.01^{-12}) \div 0.01 - 243,000 \\ &= 50,000 \times (1 - 0.887449) \div 0.01 - 243,000 \\ &= 50,000 \times 0.112551 \div 0.01 - 243,000 \end{aligned}$$

$$\begin{aligned} &= 50,000 \times 11.2551 - 243,000 \\ &= 562,754 - 243,000 \\ &= \text{K}319,754 \end{aligned}$$

**END OF SOLUTIONS**



TAXATION PROGRAMME EXAMINATIONS

---

CERTIFICATE LEVEL

---

C3: ACCOUNTANCY FOR TAX PRACTITIONERS

---

MONDAY 15 DECEMBER 2021

---

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 question paper consists of FIVE (5) questions of twenty (20) marks each. You MUST attempt all the FIVE (5) 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.**

**Attempt all five (5) questions in this paper.**

**QUESTION ONE**

The following trial balance was extracted from the books of Joe Banda enterprises for the year ended 31 December 2020. Joe Banda is a VAT registered trader. The standard rate of VAT is 16%.

	<b>DR</b>	<b>CR</b>
	<b>K</b>	<b>K</b>
Revenue (Vat inclusive)		232,000
Purchases (Vat Inclusive)	162,400	
Receivables and payables (VAT inclusive)	20,000	12,000
Office furniture – at cost	25,000	
Motor vehicles – at cost	82,000	
Accumulated depreciation:		
Office furniture		10,000
Motor vehicles		18,000
Capital		62,400
Discount allowed	2,500	
Electricity	4,500	
Rent and rates	35,000	
Bank		5,600
General expenses	3,500	
Discount received		5,100
Allowance for receivables		700
Inventory – 1 January, 2020	14,000	
Suspense account		3,100
	<hr/>	<hr/>
	348,900	348,900
	<hr/>	<hr/>



You are provided with additional information below for inclusion in the financial statements at the year-end:

1. Closing inventory is to be valued at K16,500.
2. Rent amounting to K1,500 has been paid in advance.
3. An electricity bill with a value of K2,800 has been accrued.
4. Total VAT paid during the year was K4,900. This payment was completely omitted from the books of Joe Banda.
5. The allowance for receivables is to be reduced to K400.
6. Depreciation on office furniture is to be charged on a straight line basis at 20% per annum. Depreciation for motor vehicles is to be charged at 10% reducing balance.
7. The suspense account above relates to purchases returns which were omitted from Joe Banda's records. The payables account was updated accordingly.

**Required:**

- (a) Prepare Banda's statement of profit or loss for the year ended 31 December, 2020. (12 marks)
- (b) Prepare Banda's statement of financial position as at 31 December, 2020. (8 marks)

**[Total: 20 Marks]**

**QUESTION TWO**

The following information is available for the years 2018, 2019 and 2020:

	<b>2018</b> <b>K</b>	<b>2019</b> <b>K</b>	<b>2020</b> <b>K</b>
Opening inventory	30,000	60,000	84,000
Purchases	<u>210,000</u>	<u>258,000</u>	<u>231,000</u>
	240,000	318,000	315,000
Less: Closing inventory	<u>(60,000)</u>	<u>(84,000)</u>	<u>(69,000)</u>
Cost of sales	<u>180,000</u>	<u>234,000</u>	<u>246,000</u>
Sales	<u>270,000</u>	<u>375,000</u>	<u>360,000</u>
Gross profit	<u>90,000</u>	<u>141,000</u>	<u>114,000</u>

The inventory valuations used at the end of 2018 and at the end of 2019 were inaccurate. The inventory at 31 December 2018 had been undervalued by K3,000, whilst that at 31 December 2019 had been over-valued by K9,000.

**Required:**

- (a) Give the corrected figures of gross profit for each of the years affected by the errors in inventory valuation. (10 marks)
- (b) Using the figures in the revised trading accounts, calculate for each year:
- (i) The percentage of gross profit to sales. (3 marks)
  - (ii) The rate of turnover of inventory. (3 marks)
- (c) Define and explain the following terms:
- (i) Dual aspect rule. (2 marks)
  - (ii) Objectivity (2 marks)

**[Total: 20 Marks]**

**QUESTION THREE**

- (a) Explain the role of an Accountant in the management of organisations. (4 marks)
- (b) It is important that financial reporting be subject to rules and regulations. The rules and regulations which apply are commonly referred to as the 'legal and regulatory framework' or Generally Accepted Accounting Practices ('GAAP'). Further, the IFRS Conceptual Framework describes the basic concepts that underlie the preparation and presentation of financial statements for external users.
- (i) Describe the four (4) main sources of regulation that represents Zambian 'legal and regulatory framework'. (4 marks)
  - (ii) Briefly explain the main contents of the Conceptual Framework for financial reporting. (4 marks)
- (c) Discuss how computers are used in the accounting function, identifying the benefits and limitations to the organisation. (8 marks)

**[Total: 20 Marks]**

**QUESTION FOUR**

Cynthia and Farai have been trading from 1 April 2020 as partners. Cynthia contributed K80,000 as capital and Farai contributed K 60,000. The Partnership Agreement provides for the following:

Farai to get an annual salary of K72,000  
Interest to be charged on capital at the rate of 5% per annum  
Interest to be charged on drawings at the rate of 3% per annum.  
Profit sharing ratio is 3:2

The profit reported for the period to 31 December 2020 was K240,000. This amount is after charging partners' drawings as salaries.

During the period Cynthia withdrew K16,000 on 1 July 2020, and Farai K 12,000 on 1 October 2020.

**Required:**

Prepare the following:

- (a) Brief notes on why partners charge interest on capital and on drawings, and why they pay a salary to a managing partner. (6 marks)
  - (b) Partnership Appropriation Account for the period ending 31 December 2020. (10 marks)
  - (c) Partnership Current Accounts, clearly showing closing balances. (4 marks)
- [Total: 20 Marks]**

**QUESTION FIVE**

- (a) IAS 2 states that inventory should be valued at the lower of cost and net realisable value. Explain the meaning of cost and net realisable value. (2 marks)
- (b) Identify the items that are excluded from the definition of cost according to IAS 2. (2 marks)
- (c) Kalwisha Enterprises is a manufacturing company producing building materials. At 1 December 2020 they had 40 steel plates which cost K80 each. The following items were received during the month of December.

Date	Quantity	Unit Cost
3 Dec.	60	K83
10 Dec.	90	K83
15 Dec.	70	K84
19 Dec.	60	K85
27 Dec.	30	K82

They issued some items to production as shown below:

Date	Quantity
7 Dec.	70
12 Dec.	100
21 Dec.	130

**Required:**

Calculate the quantity and value of closing inventory on 31 December 2018 using FIFO. (12 marks)

(d) You are further provided with the following inventory figures at the year end of 31 December 2020.

	<b>Deformed Bars</b>	<b>Angle bars</b>
Production cost	K100	K200
Selling price	K120	K350
Marketing cost	K30	K100
Units held	500	300

**Required:**

Calculate the total value of closing inventory that will appear in the accounts as at 31 December 2020.

(4 marks)

**[Total: 20 Marks]**

**END OF PAPER**

### C3: ACCOUNTANCY FOR TAX PRACTITIONERS SUGGESTED SOLUTION

#### SOLUTION ONE

(a) Joe Banda statement of profit or loss for the year ended 31 December, 2018

	K	K
Revenue (232,000*100/116)		200,000
Opening inventory	14,000	
Purchases (162,400*100/116)	140,000	
	154,000	
Returns outwards	(3,100)	
	150,900	
Less closing inventory	(16,500)	
		(134,400)
Gross profit		65,600
Decrease in allowance for receivables (700-400)		300
Discount received		5,100
Total income		71,000
Expenditure		
Rent and rates (35,000-1,500)	33,500	
Electricity (4,500+2,800)	7,300	
Depreciation:		
Office equipment (25,000*20%)	5,000	
Motor Van (82,000-18,000)*10%	6,400	
Discount allowed	2,500	
General expenses	3,500	58,200
<b>Net profit</b>		12,800

W1	Vat control account	
	K	K
Bank	4,900	Output VAT
Input Vat (162,400*16/116)	22,400	(232,000*16/116)
Bal. c/d	4,700	32,000
	32,000	32,000

(b) Joe Banda statement of financial position as at 31 December, 2018

	K	K
<b>Non-current assets:</b>		
Office equipment (25,000-10,000-5,000)		10,000
Motor Van (82,000-18,000-6,400)		57,600
		<hr/>
<b>Current assets:</b>		
Inventory	16,500	
Receivables (20,000-400)	19,600	
Prepaid rent	1,500	
	<hr/>	
		37,600
		<hr/>
Total assets		105,200
		<hr/>
<b>Capital and liabilities:</b>		
Capital		62,400
Profit		12,800
		<hr/>
		75,200
<b>Non- current liabilities:</b>		
Loan		0
<b>Current Liabilities:</b>		
Payables	12,000	
Bank Overdraft (5,600+4,900)	10,500	
Accrued Electricity	2,800	
Vat payable	4,700	30,000
	<hr/>	
<b>Net profit</b>		105,200
		<hr/>

## SOLUTION TWO

(a)	2018 K	2019 K	2020 K
Opening inventory	30,000	63,000	75,000
Purchases	<u>210,000</u>	<u>258,000</u>	<u>231,000</u>
	240,000	321,000	306,000
Less: Closing inventory	<u>(63,000)</u>	<u>(75,000)</u>	<u>(69,000)</u>
Cost of goods sold	177,000	246,000	237,000
Sales	<u>270,000</u>	<u>375,000</u>	<u>360,000</u>
Gross profit	<u>93,000</u>	<u>129,000</u>	<u>123,000</u>

(b) (i) Gross profit/sales ratio

2018	2019	2020
$= \frac{93\,000 \times 100\%}{270\,000}$	$= \frac{129\,000 \times 100}{375\,000}$	$= \frac{123\,000}{360\,000}$
$= \underline{34\%}$	$= \underline{34\%}$	$= \underline{34\%}$

(ii) Inventory turnover =  $\frac{\text{Cost of goods sold}}{\text{Average inventory}}$

2018	2019	2020
$= \frac{177\,000}{(30\,000 + 63\,000) \div 2}$	$= \frac{246\,000}{(63\,000 + 75\,000) \div 2}$	$= \frac{237\,000}{(75\,000 + 69\,000) \div 2}$
= 3.8 times	= 3.6 times	= 3.3 times

(c) (i) The dual aspect rule is a recognition that every transaction involves a giving and receiving effect. The double entry method of bookkeeping reflects this effect and hence it's a very convenient method of keeping books of accounts.

(ii) What appears in the accounting statements should be objective. It should be based upon facts, not opinion. It should be free from bias and it should be capable of independent verification. This is important since users of accounting information would probably be disinclined i.e. to rely too much on it, if it was to be subsequently based on opinion of individuals.

### **SOLUTION THREE**

(a) The Role of the Accountant

- Maintaining accounting records; calculating excise duty, VAT and income tax and filing returns as an officer representing the business
- Determining the profit or loss and financial position of business by providing financial statements; related to this is the audit of the accounts
- Appraisal of investments to evaluate the worthiness of projects to the future growth of a business
- Supply information to management on cost saving strategies related to acquisitions, investments and personnel costs and other strategic and operational decisions.
- Fighting fraud by using their knowledge to establish and implement external and internal controls to prevent fraud.
- Financial services such as preparation of tax returns and financial statements, consultancy

(b)

(i) Legal and regulatory framework

NOTE: DETAILED DISCUSSION IS NOT REQUIRED, ONLY BRIEF COMMENTS

- Company law – companies are required to comply with provisions of the Companies Act e.g. prescribed formats of financial statements; disclosure requirements, limits on amount that can be distributed as dividends; provisions on increase or decrease of share capital
- Accounting standards – set by accounting profession to ensure consistency in the treatment of items in the published accounts nationally and internationally. This helps give a true and fair view and allow accounts to be compared.
- The stock exchange – in order to receive a listing for its securities a company must comply with LuSE regulations e.g disclosure of accounting information
- International influences – IASB to harmonise accounting rules; IFAC to co-ordinate the accounting profession on a global scale by issuing international standards.

(ii.) Contents of Conceptual Framework

NOTE: DETAILED DISCUSSION IS NOT REQUIRED, ONLY BRIEF COMMENTS

- Objective of financial reporting – to provide information about the reporting entity's financial performance and financial position that is useful to a wide range of users for assessing the stewardship of management and for making economic decisions.
- Qualitative characteristics of useful financial information. Fundamental ones are relevance and faithful representation. Enhancing ones are comparability, verifiability, timeliness and understandability.
- The reporting entity – a single company should prepare financial statements; also, group financial statements are required for holding company and its subsidiaries
- Definition, recognition and measurement of the elements from which financial statements are constructed. Two groups: elements related to financial position – assets, liabilities and equity; elements related to performance – income and expenses.



### (c) Computers in Accounting

#### *Uses*

- Spreadsheets – a computer-generated spreadsheet is commonly used by firms when preparing their accounts.
- Accounting software – purchased as off-the-shelf or tailor-made. These software packages will be able to perform most, if not all tasks that would normally be manually done by a person responsible for the accounts. Transactions will be entered into the computer package and many will produce the double entry accounts from the single entry.

#### *Benefits*

- Increased accuracy – computers are less likely to make errors; any errors will be as a result of the person entering data rather than the computer itself.
- Time saving – computers should be able to speed up the whole process of keeping accounting records and producing reports.
- Performance analysis – once the data has been inputted, it is possible to manipulate the existing data to produce variations in the firm's overall performance. A spreadsheet can be manipulated to consider different scenarios e.g different forecast sales or inflation.
- Job satisfaction – use of computers frees up time for the accountant to concentrate on more wide ranging tasks. More satisfaction results in higher productivity.

#### *Limitations*

- Cost – though prices have fallen, cost of computers and software packages can still be a large item of expenditure for a small firm this; this will affect the firm's cash flow.
- Reliability – though generally reliable, sometimes computer hardware and software can develop faults. It means the whole system will not be used until it is resolved creating a backlog of accounting work.
- Training time – it may take time for operators to be trained in using any accounting package on the computer. This requires personnel to be diverted from other areas they may have been working on.

## SOLUTION FOUR

( a ) Partners have to charge interest on capital because they want to be compensated for the forfeited interest they would have earned, if they invested in an alternative activity, such as a fixed deposit account.

Partners charge interest on drawings to discourage themselves from drawing too much cash and too early before the business generates profit on the cash they invested in the business.

Partners pay a salary to a managing partner to compensate him or her for the time spent running the business and using specialized skills that another partner does not have, or is not utilizing in the running of the business.

( b ) Cynthia and Farai profit or loss Appropriation Account for the year ended 31 December, 2020

	K	K
Adjusted Profit (240,000+16,000+12,000)		268,000
Interest on drawings:		
Cynthia (3% x 16,000 x 6/12)	240	
Farai (3%x 12,000 x3/12)	90	
	_____	
Salary – Farai (72,000 x 9/12)		330 (54,000)
	_____	
Interest on Capital:		
Cynthia (5% x 80,000 x 9/12)	3,000	
Farai (5%x 60,000 x 9/12)	2,250	
	_____	
		(5,250)
Residue profit		_____
		209,080
Share of Profit:		
Cynthia (209,080 x 3/5)	125,448	
Farai (209 x 60,080 x 2/5)	83,632	
	_____	
		(209,080)
Residue profit		_____
		0

(c) Credit side:	<b>CYHNTIA</b>	<b>FARAI</b>
	<b>K</b>	<b>K</b>
Salary		54,000
Interest on capital	3,000	2,250

Share of profit	<u>125,448</u>	<u>83,632</u>
	128,448	139,882
Debit side:		
Interest on Drawings	240	90
Drawings	<u>16,000</u>	<u>12,000</u>
Closing Balance	<u>112,208</u>	<u>127,792</u>

## SOLUTION FIVE

(a) IAS 2

*Cost* includes costs of purchase, costs of conversion and other costs incurred to bring the inventories to their present location and condition.

*Net realisable value* is the estimated selling price in the ordinary course of business, less the estimated cost of completion and the estimated costs necessary to make the sale.

(b) **Inventory costs not included are:**

- Abnormal waste
- Storage costs
- Administrative overheads unrelated to production
- Selling costs
- Forex differences arising directly on the recent acquisition of inventories invoiced in foreign currency.

(c) Stock valuation using FIFO

Date	Details	Receipts			Issues			Balance		
		Qty	U/cost	Total	Qty	U/cost	Total	Qty	U/cost	Total
1 Dec	Opening stock							40	K80	<u>K3,200</u>
3 Dec	Purchases	60	K83	K4,980				40	K80	K3,200
								60	K83	K4,980
								<u>100</u>		<u>K8,180</u>
7 Dec	Issues				40	K80	K3,200			
					<u>30</u>	K83	<u>K2,490</u>			
					<u>70</u>		<u>K5,690</u>	30	K83	<u>K2,490</u>
10 Dec	Purchases	90	K83	K7,470				120	K83	<u>K9,960</u>
12 Dec	Issues				100	K83	K8,300	20	K83	K1,660
15 Dec	Purchases	70	K84	K5,880				20	K83	K1,660
								<u>70</u>	K84	<u>K5,880</u>
								<u>90</u>		<u>K7,540</u>
19 Dec	Purchases	60	K85	K5,100				20	K83	K1,660
								70	K84	K5,880
								60	K85	K5,100
								<u>150</u>		<u>K12,640</u>
21 Dec	Issues				20	K83	K1,660			
					70	K84	K5,880			
					<u>40</u>	K85	<u>K3,400</u>			
					<u>130</u>		<u>K10,940</u>	20	K85	K1,700
27 Dec	Purchases	30	K82	K2,460				20	K85	K1,700
								<u>30</u>	K82	<u>K2,460</u>
31 Dec	Stock value							<u>50</u>		<u>K4,160</u>

d) **Application of Stock Valuation rule**

	Deformed bars	Angle bars	
Cost/unit	K100	K200	
NRV/unit(120-30)	K90 (350-100)	K250	
Lower value	K90 (NRV)	K200 (cost)	
Quantity in stock	500	300	
Value of stock	K45,000	K60,000	(Formula: qty in stock *value/unit)
Total value of inventory at 31 Dec. 2018 = K45,000 + K60,000 = K105,000			

**END OF SOLUTIONS**



TAXATION PROGRAMME EXAMINATIONS

---

CERTIFICATE LEVEL

---

C4: DIRECT TAXES

---

TUESDAY 14 DECEMBER 2021

---

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 question paper consists of FIVE (5) questions of twenty (20) marks each. You MUST attempt all the FIVE (5) questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. Cell Phones are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. A taxation table is provided on pages 2, 3 and 4 of this paper.

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

**(C4: Direct Taxes Taxation Table for 2021 Examinations)**

**Income Tax**

**Standard personal income tax rates**

<b>Income band</b>	<b>Taxable amount</b>	<b>Rate</b>
K1 to K48,000	first K48,000	0%
K48,001 to 57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

**Income from farming for individuals**

K1 to K48,000	first K48,000	0%
Over K48,000		10%

**Company Income Tax rates**

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%
On income from manufacture of products made out of copper cathodes	15%

## Mineral Royalty

### Mineral Royalty on Copper

#### Range of Norm Price

#### Mineral Royalty Rate

Less than US\$4,500	5.5% of norm value
From US\$4,500 to less than US\$6,000	6.5% of norm value
From US\$6,000 to less than US\$7,500	7.5% of norm value
From US\$7,500 to less than US\$9,000	8.5% of norm value
From US\$9,000 and above	10% of norm value

### Mineral Royalty on other minerals

#### Type of mineral

#### Mineral Royalty Rate

Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

## Capital Allowances

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

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

### Non- commercial vehicles

Wear and Tear Allowance	20%
-------------------------	-----



**Industrial Buildings:**

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

**Low Cost Housing (Cost up to K20,000)**

Wear and Tear Allowance	10%
Initial Allowance	10%

**Commercial Buildings**

Wear and Tear Allowance	2%
-------------------------	----

**Farming Allowances**

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

**Presumptive Taxes**

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

**Presumptive Tax for Transporters**

<b>Seating capacity</b>	<b>Tax per annum</b> K	<b>Tax per day</b> K
From 64 passengers and over	10,800	29.55
From 50 to 63 passengers	9,000	24.60
From 36 to 49 passengers	7,200	19.50
From 22 to 35 passengers	5,400	15.00

From 18 to 21 passengers	3,600	9.90
From 12 to 17 passengers	1,800	4.95
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 the realized value on the transfer of intellectual property	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%

**Attempt ALL FIVE (5) questions.**

**QUESTION ONE**

XTL Plc is a Zambian resident company engaged in manufacturing. The company listed its shares on the Lusaka Securities Exchange (LuSE) in April 2021 when it offered 25% of its issued share capital to indigenous Zambians. The following is the statement of profit or loss for the year ended 31 December 2021:

		K	K
Gross profit			1,413,000
Other income:			
Profit on disposal of plant	(Note 5)		40,000
Investment income	(Note 1)		<u>120,000</u>
			1,573,000
Expenses:			
Depreciation		160,000	
Salaries & wages	(Note 2)	880,500	
Irrecoverable debts	(Note 3)	50,000	
General expenses	(Note 4)	<u>612,000</u>	
			<u>(1,702,500)</u>
Net loss for the year			<u>(129,500)</u>

**The following information is relevant:**

**Note 1: Investment income**

This includes Royalties K85,000, Dividends K15,000 and Bank interest K20,000. The amounts of investment income are gross amounts. Withholding tax had already been deducted at source.

**Note 2: Salaries & Wages**

Included in salaries & wages is K420,000 salary paid to the directors. All the directors are accommodated in company owned houses for which they pay no rent.

**Note 3: Irrecoverable debts**

	K		K
Trade debts written off	42,000	Balance b/f:	
Loans to employees written off	70,000	General allowance	31,000
Balance c/f:		Specific allowance	120,000
General allowance	80,000	Trade debts previously	
Specific allowance	43,000	written off now recovered	34,000
		Profit or loss	<u>50,000</u>
	<u>235,000</u>		<u>235,000</u>

**Note 4: General expenses**

These include the following:

	K
Gifts of XTL Plc calendars to customers each costing K75	75,000
Gifts of food hampers each costing K98	20,800
Donation to political parties	65,000
Staff canteen expenses	34,000
Accountancy expenses	16,500
Entertaining customers	52,000
Entertaining employees	23,000
Share issue costs	36,800
Other revenue allowable expenses	<u>288,900</u>
	<u>612,000</u>

**Note 5: implements, plant & machinery**

The company had the following implements, plant & machinery at 1 January 2021:

	<b>Income Tax Value</b>	<b>Original cost</b>
	<b>K</b>	<b>K</b>
Manufacturing plant	45,000	90,000
Toyota Prado car (2,900 cc)	36,000	180,000
Office furniture	37,500	50,000

During the year the company entered into the following capital transactions:

	<b>Cost/(proceeds)</b>
	<b>K</b>
Bought manufacturing equipment	160,000
Bought Mitsubishi light truck	120,000
Sold a manufacturing plant	(110,000)
Bought a Toyota Camry car (2,200 cc)	150,000

The Toyota Prado car and the Toyota Camry car are used by the Managing Director and Finance Director respectively on a personal-to-holder basis. The private use in each car has been agreed with the Commissioner General to be 45%.

**Note 6: Provisional income tax**

The company paid provisional income tax amounting to K37,300 during the tax year 2021.

**Required:**

- (a) Calculate the maximum amount of capital allowances claimable by XTL Plc for the tax year 2021. (6 marks)
- (b) Calculate the amount of taxable business profit for the tax year 2021. (8 marks)
- (c) Calculate the amount of income tax payable by XTL Plc for the tax year 2021. (6 marks)

**[Total: 20 marks]**

## **QUESTION TWO**

Joseph Chilekwa had been employed by LTG Limited as a Marketing Manager at an annual salary of K321,000. He retired on 31 August 2021, and his conditions of service provided for the following:

Transport allowance at 20% of the basic salary  
Education allowance at 15% of the basic salary  
Medical allowance of K1,250 per month  
Meal allowance of K500 per month

He was provided with free residential accommodation, throughout his period of employment, in a company owned house for which he paid no rent. If the house was rented to any other person, the company could have charged gross monthly rentals of K10,800. The company maintains the house, and during the tax year 2021 the company incurred ancillary expenses amounting to K2,400 per month in connection with the house in which he was accommodated.

On 1 May 2021, he received a labour day award comprising of cash K23,100 and a Laptop valued at K12,000. He also received a long-term service award as the longest serving employee, which was paid to him in cash amounting to K18,000.

On retirement, he received a pension amounting to K576,000, leave pay K33,200, repatriation pay K32,000, severance pay K40,000 and accrued service bonus K60,000.

During the tax year 2021, he made the following payments:

	<b>K</b>
Tax paid under Pay as You Earn system	102,313
Donation to an approved public benefit organization	11,000
Children's school fees	34,200
Donation to political party	10,000
Subscription to the Zambia Institute of Marketing	5,200

He has always made NAPSA contributions at 5% of his basic salary. During the tax year 2021, he made National Health Insurance Management Authority (NHIMA) contributions at a rate of 1% of the basic salary.

During the tax year 2021, he received Royalties amounting to K52,700 (net), Bank interest K10,500 (gross), Interest on Government bonds K18,700 (net), Dividends from a LuSE listed company K20,000 (gross) and Rental income K72,000 (net). Withholding tax had been deducted where appropriate.

**Required:**

(a) Calculate the total amount of withholding tax paid by Joseph Chilekwa on the investment income received during the tax year 2021. You should show the amount of withholding tax paid on each type of investment income received. (4 marks)

(b) Calculate the final amount of income tax payable by Joseph Chilekwa for the tax year 2021. You should indicate zero (0) for all benefits that are not taxable. (16 marks)

**[Total: 20 marks]**

**QUESTION THREE**

Taabo and Maabo are in partnership sharing profits and losses in the ratio of 2:1 respectively after allowing for annual partnership salaries of K148,000 for each partner.

On 1 April 2021, Kaabo was admitted to the partnership and with effect from that date the partnership agreement was changed. Profits and losses were to be shared as follows:

	<b>Taabo</b>		<b>Maabo</b>		<b>Kaabo</b>
Annual salaries	K240,000		K280,000		K220,000
Profits and losses	5	:	3	:	2

The partnership made an adjusted business profit of K1,100,000 for the year ended 31 December 2021. This profit is after all necessary adjustments have been made but before capital allowances.

The partnership had the following implements, plant & machinery as at 1 January 2021:

	<b>Income tax value</b>	<b>Original cost</b>
	<b>K</b>	<b>K</b>
Office equipment	40,000	80,000
Mitsubishi Light truck	165,000	220,000
Fixtures & fittings	42,000	56,000
Toyota Delivery van	97,500	130,000

During the year ended 31 December 2021 the partnership bought three (3) motor cars at a total cost of K210,000. These motor cars are used by the partners for both business and private purposes. It has been agreed with the Commissioner General that private use in each car by the partners is 40%.

The partners had no other income during the tax year 2021.

**Required:**

(a) Calculate the amount of capital allowances claimable on partnership assets for the tax year 2021. (6 marks)

(b) Calculate the final amount of income tax payable by each partner for the tax year 2021. (14 marks)

[Total: 20 marks]

**QUESTION FOUR**

(a) Property transfer tax (PTT) is tax charged on the transfer of property.

**Required:**

Explain the meaning of property and give any four (4) examples of such properties.  
(5 marks)

(b) Explain how the realized value of the properties is determined for the purposes of property transfer tax (PTT). (4 marks)

(c) Explain the meaning of member of immediate family and the treatment of transfers of property made to members of the immediate family. (3 marks)

(d) Joe Zuze sold the following assets during the year ended 31 December 2021 in order to raise capital for his business:

(1) On 5 January 2021, he sold a plot for K130,000. The open market value of the plot as determined by the valuations department at the same date was K166,000. He paid K2,000 to the surveyors and K1,500 for the valuations services. He acquired the plot in 2010 at a cost of K44,000.

(2) On 15 February 2021, he sold a Toyota Prado car for K112,000. He incurred total costs of K2,000 for the repairs. The repairs were necessary to make the motor car marketable. The Toyota Prado car was acquired in 2018 at a cost of K120,000.

(3) On 1 April 2021, he sold 2000 shares in CTF Plc, a Lusaka Securities Exchange (LuSE) listed company, for K12 per share. The open market value as determined by approved share valuation method was K11 per share. He incurred total costs K3,000 to complete the sale transaction. He acquired these shares two (2) years ago at a cost K9 each.

(4) On 22 April 2021, he sold a house to his first born daughter for K60,000. The house had an open market value of K450,000.

(5) On 13 June 2021, the 1,500 shares he held in TDG Limited, a private company, for K15 each. The market value of the shares at the same date was K12 per share. These shares were acquired at a cost of K8 each.

**Required:**

Explain the property transfer tax implications of the above transactions. You should calculate the amount of property transfer tax payable (if any) on each of the above transactions.

(8 marks)

[Total: 20 marks]

## **QUESTION FIVE**

(a) Turnover tax is charged on gross turnover and it is paid by all persons whose annual business turnover is K800,000 and less.

### **Required:**

Explain any five (5) persons who are not required to pay turnover tax. (5 marks)

(b) Presumptive tax for transporters is tax paid by all individuals engaged in public transportation of persons for a reward. Presumptive taxes are said to have more benefits than the regular assessed tax systems.

### **Required:**

Explain the benefits of presumptive tax for transporters over the regular assessed income tax. (5 marks)

(c) Income tax is chargeable on the gains and income of all persons resident in the Republic of Zambia.

### **Required:**

(i) Explain the factors used to establish whether an individual is a resident in Zambia. (3 marks)

(ii) Explain the factors used to establish whether a company is a resident in Zambia. (3 marks)

(d) Explain the difference between progressive taxes and regressive taxes giving one (1) example for each. (4 marks)

**[Total: 20 marks]**

**END OF PAPER**



## C4: DIRECT TAXES SUGGESTED SOLUTIONS

### SOLUTION ONE

#### (a) XTL Plc

#### Capital allowances for the tax year 2021

	<u>Cost/ITV</u>	<u>Capital Allowances</u>
	<u>K</u>	<u>K</u>
<b><u>Manufacturing plant</u></b>		
Income tax value b/f	45,000	
Disposal proceeds (restricted to cost)	<u>(90,000)</u>	
Balancing charge		(45,000)
<b><u>Toyota Prado Car</u></b>		
Income tax value b/f	36,000	
Wear & tear @20%	<u>(36,000)</u>	36,000
Income tax value c/f	<u>Nil</u>	
<b><u>Office Furniture</u></b>		
Income tax value b/f	37,500	
Wear & Tear @25%	<u>(12,500)</u>	12,500
Income tax value c/f	<u>12,500</u>	
<b><u>Manufacturing equipment</u></b>		
Cost	160,000	
Wear & Tear @50%	<u>(80,000)</u>	80,000
Income tax value c/f	<u>80,000</u>	
<b><u>Mitsubishi Light truck</u></b>		
Cost	120,000	
Wear & Tear@25%	<u>(30,000)</u>	30,000
Income tax value	<u>90,000</u>	
<b><u>Toyota Camry car</u></b>		
Cost	150,000	
Wear & Tear @20%	<u>(30,000)</u>	<u>30,000</u>
Income tax value	<u>120,000</u>	
<b>Total capital allowances</b>		<u>143,500</u>

#### **(b) Adjusted business profit for the tax year 2021**

	<u>K</u>	<u>K</u>
Net profit loss for the year		(129,500)
Add:		
Depreciation	160,000	
Free accommodation benefit (K420,000 x 30%)		126,000

Loans to employees written off	70,000	
Increase in general provision (80,000 – 31,000)	49,000	
Gifts of food hampers	20,800	
Donation to political parties	65,000	
Staff canteen expenses	34,000	
Entertaining customers	52,000	
Share issue costs	<u>36,800</u>	
		<u>613,600</u>
		484,100
Less:		
Profit on disposal of plant	40,000	
Royalties	85,000	
Dividends	15,000	
Bank interest	20,000	
Capital allowances (a)	<u>143,500</u>	
		<u>(303,500)</u>
Taxable business profit		<u>180,600</u>

**(c) Income tax payable for the tax year 2021**

**K**

Adjusted business profit	180,600
Add:	
Royalties	85,000
Bank interest	<u>20,000</u>
Total taxable income	<u>285,600</u>
Income tax @ (35% – 2%) 33%	94,248
Less:	
WHT- Royalties (K85,000 x 15%)	(12,750)
WHT- Bank interest (K20,000 x 15%)	(3,000)
Provisional income tax	<u>(37,300)</u>
Income tax payable	<u>41,198</u>

## SOLUTION TWO

### (a) Joseph Chilekwa

#### Withholding tax paid for the tax year 2021

	K
Royalties (K52,700 x 15/85)	9,300
Bank interest	0
Interest on Government bonds (K18,700 x 15/85)	3,300
Dividends from LuSE listed company	0
Rental income (K72,000 x 10/90)	<u>8,000</u>
Total withholding tax	<u>20,600</u>

### (b) Joseph Chilekwa

#### Income tax payable for the tax year 2021

	K	K
Salary (K321,000 x 8/12)		214,000
Transport allowance (K214,000 x 20%)		42,800
Education allowance (K214,000 x 15%)		32,100
Medical allowance (K1,250 x 8)		10,000
Meal allowance (K500 x 8)	4,000	
Free accommodation benefit		0
Ancillary expenses (K2,400 x 8)		19,200
Labour day award		0
Long-term service award		18,000
Pension		0
Leave pay		33,200
Repatriation pay		0
Severance pay		0
Accrued service bonus		<u>60,000</u>
Gross emoluments		433,300
Investment income		
Royalties (K52,700 x 100/85)	<u>62,000</u>	
		495,300
Less:		
Donation to approved public benefit Organization	11,000	
Professional subscription	<u>5,200</u>	
		<u>(16,200)</u>
Taxable income		<u>479,100</u>
Computation		
First K48,000 @0%	0	
Next K9,600 @25%	2,400	

Next K25,200 @30%	7,560
Excess K396,300 @37.5%	<u>148,613</u>
Income tax liability	158,573
Less:	
PAYE	(102,313)
WHT – Royalties (K62,000 x 15%)	<u>(9,300)</u>
Income tax payable	<u><u>46,960</u></u>

### SOLUTION THREE

#### **(a) Taabo, Maabo and Kaabo** **Capital allowances for the tax year 202**

	<b><u>Cost/ITV</u></b>	<b><u>Capital allowances</u></b>
	<b>K</b>	<b>K</b>
<b><u>Office equipment</u></b>		
Income tax value b/f	40,000	
Wear & tear @25%	<u>(20,000)</u>	20,000
Income tax value c/f	<u>20,000</u>	
<b><u>Mitsubishi Light truck</u></b>		
Income tax value b/f	165,000	
Wear & tear @25%	<u>(55,000)</u>	55,000
Income tax value c/f	<u>110,000</u>	
<b><u>Fixtures &amp; fittings</u></b>		
Income tax value b/f	42,000	
Wear & tear @25%	<u>(14,000)</u>	14,000
Income tax value c/f	<u>28,000</u>	
<b><u>Toyota Delivery van</u></b>		
Income tax value b/f	97,500	
Wear & tear @25%	<u>(32,500)</u>	32,500
Income tax value c/f	<u>65,000</u>	
<b><u>Motor cars</u></b>		
Cost	210,000	
Wear & tear @20%	<u>(42,000)</u> x 60%	<u>25,200</u>
Income tax value c/f	<u>168,000</u>	
<b>Total capital allowances</b>		<b><u>146,700</u></b>

**(b) Taabo, Maabo and Kaabo**  
**Income tax payable for the tax year 2021**

	<b>K</b>
Business profit	1,100,000
Less:	
Capital allowances (a)	<u>(146,700)</u>
Taxable business profit	<u>953,300</u>

	<b>Total K</b>	<b>Taabo K</b>	<b>Maabo K</b>	<b>Kaabo K</b>
First 3 months				
Salary	74,000	37,000	37,000	-
Balance 2:1	<u>164,325</u>	<u>109,550</u>	<u>54,775</u>	<u>-</u>
	<u>238,325</u>	<u>146,550</u>	<u>91,775</u>	<u>-</u>
First 9 months				
Salary	555,000	180,000	210,000	165,000
Balance 5:3:2	<u>159,975</u>	<u>79,988</u>	<u>47,992</u>	<u>31,995</u>
	<u>714,975</u>	<u>259,988</u>	<u>257,992</u>	<u>196,995</u>
Total	<u>953,300</u>	<u>406,538</u>	<u>349,767</u>	<u>196,995</u>

**Computation**

First K48,000 @0%	0	0	0
Next K9,600 @25%	2,400	2,400	2,400
Next K25,200 @30%	7,560	7,560	7,560
Excess K323,738/K266,967 @37.5%	121,402	100,113	-
- K114,195 @37.5%	<u>-</u>	<u>-</u>	<u>42,823</u>
Income tax payable	<u>131,362</u>	<u>110,073</u>	<u>52,783</u>

## **SOLUTION FOUR**

(a) Property means immovable assets for the purposes of property transfer tax. This means that all movable assets are not classified as property for the purposes of PTT.

The following are the categories of property qualifying for PTT:

- (1) Any Land in Zambia (including any building on that land)
- (2) Any Building, structure, or other improvements thereon
- (3) Any share issued by a company in Zambia that is not listed on the Lusaka Securities Exchange (LuSE).
- (4) Mining rights
- (5) Intellectual property.

(b) The realized value of the transferred property is determined as follows:

As a general rule, the realized value of any property is determined as the higher of:

- (i) The contract price agreed upon by the transferor and the transferee, and
- (ii) The open market value of the property at the date of transfer

For shares, the realized value is the higher of:

- (i) The nominal value of the shares, and
- (ii) The open market value of the shares at the date of transfer or the actual contract price agreed.

(c) Member immediate family includes a spouse, own blood child, duly adopted child or stepchild. Where a person transfers property to a member of the immediate family, the realized value of such property is the actual price received by the transferor, if any.

This means that such transfers will be treated as having a realized value of nil if no price has been paid. Therefore, if a person makes a gift of property to a member of the immediate family, property transfer tax would not be payable.

(d) The property transfer tax implications are as follows:

- (1) Property transfer tax would be payable on the transfer of the plot at a rate of 5% of the realized value of the plot. The realized value in this case is K166,000. The fees incurred in making the transfer are not deductible for the purposes of computing property transfer tax.

Property transfer tax payable will be:  $K166,000 \times 5\% = \underline{K8,300}$ .

- (2) Property transfer tax would not be payable on the transfer of the motor vehicle because motor vehicles are not property for property transfer tax purposes.

- (3) There would be no property transfer tax on the transfer of shares listed on the Lusaka Securities Exchange (LuSE). Transfer of shares listed on the Lusaka Securities Exchange is exempt from property transfer tax.

- (4) Property transfer tax would be payable on the transfer of the house to his daughter. The realized value would be the actual price received from the daughter. The

realized value of transfer of property to members of the immediate family is the actual price received.

Property transfer tax = K60,000 x 5% = K3,000.

(5) Property transfer tax (PTT) would be payable on the transfer of shares because the shares are not listed on the Lusaka Securities Exchange (LuSE). PTT will be charged on the realized value of K15 per share.

Property transfer tax payable = K15 x 1,500 shares x 5% = K1,125.



## **SOLUTION FIVE**

(a) The following persons are not required to pay turnover tax:

- (1) Any person carrying on the business whose annual turnover is more than K800,000.
- (2) Any individual or partnership carrying on business of public service vehicle for carriage of persons.
- (3) Partnership carrying on any business irrespective of whether the annual turnover is more than K800,000.
- (4) Partners' income from the partnership is also excluded from turnover tax.
- (5) Any person whose income is subjected to withholding tax and it is the final tax.
- (6) Any person running the business where the annual turnover is less than K800,000 but has registered for Value Added Tax voluntarily.
- (7) Any person who is involved in mining operations as provided under the Mines and Minerals Development Act.

(b) The following are the benefits of presumptive taxes:

- (1) The process of dealing with taxes under presumptive taxes has been simplified. There is no requirement to file returns, no requirement to keep proper business accounting records.
- (2) The presumptive taxes are cash flow friendly because operators find it easy to pay the whole range of fees on a daily basis and this does not disrupt the daily cash flow position.
- (3) There is no need for professional consultancy under presumptive taxes because the taxes are straight forward. Presumptive taxes can be paid by the driver or the conductor.
- (4) There are no free riders under presumptive taxes because all transporters are expected to play their roles.
- (5) Presumptive taxes allows for break downs as the tax is only charged for the vehicles that are on the road during the tax accounting period.

(c) Residence

(i) An individual is regarded as a resident in Zambia if:

- (1) He /She is physically present in Zambia for at least 183 days excluding the date of arrival and the date of departure.
- (2) He /She comes to Zambia for the purpose that will take more than twelve (12) months, then that individual will be regarded as resident in Zambia on the date of arrival.
- (3) He /She comes to Zambia with the intentions of establishing permanent residence in Zambia, then from the date of arrival that individual will be regarded as a resident.

(ii) A company is regarded as a resident if:

- (1) The company is incorporated or formed in Zambia; and
- (2) The effective management and control of the company's business is exercised in Zambia.

The company is effectively managed in Zambia if the board of directors or other central management board of the company meets in Zambia to make decisions relating to the operations of the company.

(d) Progressive taxes are taxes whose average rate of tax (marginal rate) increases as the level of a person's income increases. Under the progressive tax system, taxes are paid on the ability to pay basis, for example pay as you earn and income tax.

Regressive taxes are taxes whose average rate (marginal rate) of tax decreases as the level of a person's income increases. Under regressive tax system, taxes are paid indirectly on the expenditure; for example value added tax and customs duty.

**END OF SOLUTIONS**



TAXATION PROGRAMME EXAMINATIONS

---

CERTIFICATE LEVEL

---

C5: INDIRECT TAXES

---

THURSDAY 16 DECEMBER 2021

---

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

---

**INSTRUCTIONS TO CANDIDATES**

1. You have fifteen (15) minutes reading time. Use this time to carefully study the examination paper so that you understand what to do in each question.
2. This question paper consists of FIVE (5) questions of Twenty (20) marks each. You MUST attempt all the FIVE (5) 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 in your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. Cell Phones are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. A taxation table is provided on page 2, 3 and 4.

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

## Taxation table for paper C5- Indirect Taxes (June and December Examinations)

### Value Added Tax

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

### Customs and Excise

#### Customs and Excise duties on used motor vehicles

	Aged 2 to 5 years		Aged over 5 years	
	Customs duty K	Excise duty K	Customs duty K	Excise duty K
<b>Motor vehicles for the transport of ten or more persons, including the driver</b>				
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0
	Aged 2 to 5 years		Aged over 5 years	
<b>Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars</b>	Customs duty K	Excise duty K	Customs duty K	Excise duty K
<b>Sedans</b>				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
<b>Hatchbacks</b>				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
<b>Station wagons</b>				

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

### **SUVs**

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

**Aged 2 to 5 years**

**Aged over 5 years**

### **Motor vehicles for the transport of goods –with compression-ignition internal combustion piston engine (diesel or semi-diesel):**

	<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>

#### **Single cab**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, <b>with spark ignition internal combustion piston engine</b>	30,697	13,302	24,119	10,452

#### **Panel Vans**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601

#### **Trucks**

GVW up to 2 tonnes	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,461	0
GVW exceeding 20 tonnes, <b>with spark ignition internal combustion piston engine</b>	37,086	28,432	13,907	10,662

### Customs and excise duty on new vehicles

- 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:	30%
Excise duty:	
Cylinder capacity of 1500 cc and less	20%
Cylinder capacity of more than 1500 cc	30%
- 2 Pick-ups and trucks/lorries with gross weight not exceeding 20 tonnes:

Customs duty	15%
Excise duty	10%
- 3 Buses/coaches for the transport of more than ten persons

Customs duty:	15%
Excise duty:	
Seating capacity of 16 persons and less	25%
Seating capacity of 16 persons and more	0%
- 4 Trucks/lorries with gross weight exceeding 20 tonnes

Customs duty:	15%
Excise duty:	0%

The minimum amount of customs duty on motor vehicles is K6,000.

Import VAT is added to the sum of VDP, customs duty and excise duty. It is determined at the standard rate of 16%

### Attempt all FIVE (5) Questions.

#### **QUESTION ONE**

- (a) Ken Hilomwe is a registered trader for value added tax. He deals in office stationery. During the month of October 2021, his sales revenue amounted to K140,500. Included in this figure are exempt supplies amounting to 15%. The remainder are all standard-rated supplies. The following transactions took place during the month of October:

	K
Purchases	70,300
Motor van (inclusive of VAT)	45,200
Diesel	6,100
Entertainment expenses of customers (Inclusive of VAT)	2,668
Overheads (inclusive of VAT)	13,700

15% of the purchases are exempt supplies. The remainder of the purchases are all standard-rated supplies.

**Unless stated otherwise all the above figures are exclusive of VAT.**

**Required:**

- (i) Explain any four (4) conditions under which input Value Added Tax is recoverable. (4 marks)
  - (ii) Calculate the Value Added Tax payable by Ken Hilomwe for the month of October 2021, showing clearly VAT chargeable or claimable. (6 marks)
- (b) Dan Sikombe commenced a retail business making standard rated supplies on 1 January 2021. Sikombe is not sure whether he is required to register his business for Value Added Tax.

**Required:**

- (i) Explain five (5) obligations Dan Sikombe need to comply with once he registers his business for VAT. (5 marks)
- (ii) Explain the circumstances that can lead to a VAT registration being cancelled by ZRA. (5 marks)

**[Total: 20 marks]**

**QUESTION TWO**

It is important to properly value goods which are imported in the country so that customs duty and excise duty is properly accounted for.

**Required:**

- (a) Explain the six (6) methods that are used to calculate the Value for Duty Purposes (VDP) of imported goods (12 marks)
- (b) International trade agreements are entered into to ease the movement of goods between countries:

**Required:**

- (i) Explain the difference between Quotas and Tariffs. (3 marks)
  - (ii) Explain any two (2) reasons why tariffs would be preferred to quotas (4 marks)
- (c) Define surtax on carbon emissions (1 mark)

**[Total: 20 marks]**

### **QUESTION THREE**

Mabvuto Saukani retired from the Civil Service after serving for more than 30 years. He was recently paid his pension which he partly used to import a car from Japan.

He imported a brand new twenty tonne (18) Light truck at a cost of \$25,500. He also paid insurance charges of \$3,500 and freight charges of \$1,700. Other incidental costs amounting to \$1,050 up to the port of entry and transport costs from Chirundu border post to Lusaka was K10,500.

The Truck arrived at Chirundu border post on 15 November 2021 and all import taxes were paid by the company on that date. The Commissioner General provided an exchange rate of K12.40 Per \$1. However, the exchange rate quoted by most of the Bureau De Changes was K13.00 per \$1.

#### **Required:**

- (a) Explain what is meant by Value for Duty Purposes (VDP) and how it is determined. (3 marks)
- (b) Calculate the Value for Duty Purposes of the Light truck. (3 marks)
- (c) Calculate the total amount of import taxes paid at Chirundu border post. (4 marks)
- (d) The Government of the Republic of Zambia has come up with export concessions in order to promote exportation of locally manufactured products. One of the concessions is duty draw back claim.

#### **Required:**

- (i) Explain what is meant by Duty Drawback System and its purpose. (2 marks)
- (ii) Explain the challenges of the Duty Draw Back System. (3 marks)
- (iii) Explain the meaning of a Duty Drawback coefficient. (2 marks)
- (e) Explain the meaning of a sale in the open market (3 marks)

**[Total: 20 marks]**

### **QUESTION FOUR**

- (a) The export of taxable goods is zero-rated for VAT. For exported goods to be zero-rated, the goods must be supplied or sold direct to a business abroad and the exportation of goods made by or on behalf of the supplier. There must also be proof of exportation in form of documentation.

#### **Required:**

State four (4) documents which the exporter should provide as proof of exportation of goods. (2 marks)



- (b) A lease is an agreement whereby the lessor (the legal owner of an asset) conveys to the lessee (the user of the asset) the right to use an asset for an agreed period of time in exchange for a payment or series of payments.

**Required:**

Explain the VAT treatment for motor cars purchased for leasing. (2 marks)

- (c) Foreign tourists visiting Zambia are permitted to get a refund of VAT paid on goods purchased from approved retailers that are exported from Zambia.

**Required:**

- (i) State two (2) conditions of an eligible tourist and four (4) items required for a tourist to be refunded the VAT paid. (4 marks)
- (ii) Explain four (4) services which are treated as zero-rated for VAT in the tourism sector. (4 marks)
- (d) Tax points of supplies are determined differently depending on the type of supply in question.

**Required:**

- (i) Explain the tax point of sales under hire purchase. (2 marks)
- (ii) Explain the tax point of continuous supplies. (2 marks)
- (iii) Explain the tax point of sale or return. (2 marks)
- (iv) Explain the tax point of staged and part payments (2 marks)

**[Total: 20 marks]**

**QUESTION FIVE**

Zambia is a member of various international trade organizations and the Government of the Republic of Zambia has joined some of these organizations such as COMESA, SADC and PTA and has signed various Trade agreements. This has been done in order to improve and facilitate trade amongst various countries. And the Preferential Trade Agreement (PTA) was created in order to expand intra- Africa trade.

**Required:**

- (a) (i) Explain the objectives of Preferential Trade Agreement (PTA). (4 marks)
- (ii) Explain the main aim of African Growth Opportunity Act (AGOA). (2 marks)
- (iii) State the eligibility criteria used for goods to be accepted as originating in the member states of COMESA and SADC (5 marks)

- (b) The COMESA Customs Union succeeded the Free Trade Area (FTA) which came into existence since October 2000 to deal with a number of issues related to trade.

**Required:**

State four (4) major areas focused by the COMESA Customs Union. (2 marks)

- (c) Zambian importers can benefit from the installation of a bonded warehouse as long as consent is obtained from the Commissioner General to determine the kind of goods that can be warehoused. The proprietor or occupier of the house should make an application to the local Customs Station Manager requesting permission to have the warehouse approved and licensed.

**Required:**

- (i) Define a bonded warehouse and who should register for such a warehouse. (2 marks)
- (ii) State the maximum period goods may remain in the bonded warehouse. (2 marks)
- (d) Explain any three (3) roles of the Customs and Excise Division of ZRA in the exportation goods. (3 marks)

**[Total: 20 marks]**

**END OF PAPER**

## C5: INDIRECT TAXES SUGGESTED SOLUTIONS

### SOLUTION ONE

(a) Ken Hilomwe

(i) The conditions under which input VAT is recoverable are:

1. The supply must have been made to VAT registered person
2. The supply must be supported by evidence in form of tax invoice.
3. The VAT should not be that which is irrecoverable e.g. entertainment expenses to customers
4. The person making the claim must use the goods or services for business.
5. The supply must have been to the taxable person making the claim

(ii) Ken Hilomwe

VAT payable for the month of October 2021

	K	K
Output VAT		
Standard-rated sales: K140, 500 x 85% x 16%		<u>19,108</u>
		19,108
Input VAT		
Standard-rated purchases:		
K70, 300 x 85% x 16%	9,561	
Overheads: K13, 700 x 4/29 x 85%	1,606	
Motor van: K45, 200 x 4/29	6,234	
Diesel: zero rated	—	1
		<u>(17,401)</u>
VAT payable		1,707

(b) Dan Sikombwe

(i) Dan Sikombe will have the following obligations in relation to VAT once registered:

1. He will be required to display the VAT registration certificates at her business premises.
2. He will be required to issue tax invoices in respect of the supplies she makes.
3. He will be required to complete and submit VAT returns, and pay VAT on the due dates.
4. Sikombe must maintain VAT records for a minimum period of at least six years and allow VAT inspectors access to the VAT records at any time.
5. Sikombe will have to inform the Zambia Revenue Authority of any change in the legal circumstances of her business that will warrant a cancellation of the VAT registration.

(ii) VAT registration application can be cancelled where:

1. There is a change in the legal status of an entity
2. The business ceases to trading permanently
3. The business is sold
4. The intention to make supplies by an intended trader ceases
5. The business ceases to deal in taxable supplies

## **SOLUTION TWO**

### (a) Valuation methods used

#### 1. Transaction Value

This based on the rice actually paid or payable including insurance, freight and other incidental costs to the extent that they are paid.

#### 2. Transaction value of identical goods

This is the price of identical goods imported by another importer into Zambia from the same source including insurance, freight and other incidental costs.

#### 3. Transaction value of similar goods

This is the price of similar goods imported by another importer into Zambia from the same source including insurance, freight and other incidental costs.

#### 4. Deductive value

This is the price at which identical and similar goods imported into the country are sold in their quantities in Zambia.

#### 5. Computed value

This is the price based on the cost of production, insurance, freight and other incidental costs incurred in the delivery of goods into Zambia.

#### 6. Residual value

This is the price arrived at by going through all the above five (5) methods flexibly.

### (b) Tariffs and Quotas

(i) The difference between quotas and tariffs is that quotas are quantitative restrictions on the quantity or value of a commodity to be imported in a country during a period while tariffs are taxes that are levied on imported goods

(ii) Tariffs are preferred to quotas because:

1. They are taxes that raise tax revenue to the government.
2. Administrative corruption is minimised.
3. Quotas are more likely to cause smuggling of goods into the country.

### (c) Surtax

This is an environmental tax on carbon dioxide emissions. It is charged on all activities, which emit the carbon dioxide including motor vehicles.

### SOLUTION THREE

(a) **Value for Duty Purposes**

Customs duty is based on some value and excise duty is based on some appropriate value.

The value on which customs duty is based is called value for customs duty purposes. It is computed based on cost, insurance and freight (CIF) plus any other costs incurred to bring the goods to the entry point into Zambia.

(b) **Customs Value for the Mini bus:**

	\$
Cost	25,500
Insurance	3,500
Freight	1,700
Other incidental costs	<u>1,050</u>
	<u>31,750</u>
Value for Duty Purposes (\$31,750 x K12.40)	K393,700

(c) **Computation of import taxes paid:**

	Value K	Taxes K
Value for Duty purposes	393,700	
Customs Duty @15%	<u>59,055</u>	59,055
	452,755	
Excise duty @10%	<u>45,276</u>	45,276
	498,031	
Import VAT @ 16%	<u>79,685</u>	79,685
	<u>577,716</u>	
Total import taxes paid		<u>184,016</u>

(d) **Duty Draw Back System**

- (i) Duty drawback system is an export support program by the government that enables local manufacturers to get back any taxes incurred either directly or indirectly on any goods produced for export.

The purpose of duty drawback is to avoid double taxation.

- (ii) **Challenges of the Duty Draw Back System**

Time and administratively demanding on the part of the exporter who must

keep detailed records to support every claim for drawback from Zambia Revenue Authority (ZRA).

The exporter must keep records of all imported inputs and duties paid. This can be costly and cumbersome.

The system on the part of ZRA must be designed so that it will work smoothly and refund the correct amount, unfortunately this is not the case leading to system malfunctioning.

(iii) DDB coefficient is the ratio of value of duties to the value of exported output.

(e) A sale in the open market means that:

1. The price is the sole consideration
2. The price is not influenced by any condition or relationship between the buyer and the seller
3. No part of the proceeds on resale would accrue to the seller.

## **SOLUTION FOUR**

(a) The following documents should be provided for proof of exportation of goods:

1. Commercial invoices
2. Certified copies of the documents presented to Zambian Customs at exportation
3. Certified copies of customs import at the country of destination
4. Proof of payment if applicable

(b) Input tax on the importation of motor cars is non-deductible. However, leasing companies are permitted by Statutory Instrument to reclaim input tax on their purchases of motor cars for leasing.

(c) Foreign tourists

(i) The eligible tourist is a person who:

1. Is not a resident of Zambia (i.e. has not been in Zambia for more than 12 months out of the previous 24 months) or
2. Does not hold a Zambian passport.

A tourist is refunded upon production of the following items:

1. The goods
2. An export tax invoice
3. His/her passport
4. An airline ticket (required if using airline to exit Zambia)

(ii) Services, which are Zero-rated for VAT in the tourism sector, include:

1. Accommodation in Livingstone District
2. Tour packages throughout Zambia
3. Other tourist services provided to foreign tourists other than those included in tour packages
4. Refund of VAT for non-resident tourists and visitors on selected goods.

(d) Tax points

(i) The tax point of sales under hire purchase is one of the following:

1. when goods are collected
2. when goods are delivered
3. when goods are made available to the consumer
4. When payment is made
5. when tax invoice is issued

(ii) The tax point of continuous supplies is the earliest of the time when a tax invoice is issued and the time when the services are rendered and when payment is made.



- (iii) The tax point of a sale or return is when the sale is adopted, the tax invoice or payment.
- (iv) The tax point of staged payment and part payments is the time of receipt of the money.

## **SOLUTION FIVE**

### (a) Trade Agreements

#### (i) The objectives of PTA

1. To promote cooperation and integration covering all areas of economic activity particularly trade and customs, industry, transport and communications, agriculture and monetary affairs
2. To raise the standard of living among the people of the region by fostering closer relations among member states
3. To create a common market by the year 2000 in order to allow the free movement of goods, capital and labour within the sub region
4. To contribute to the progress and development of all other African countries

#### (ii) The main aim of AGOA is to promote two way trades between Sub-Saharan Africa and the United States as well as increase US investment into the Sub Sahara Africa.

#### (iii) Eligibility criteria

1. Goods wholly produced in the member state (that is no raw material has been used from outside the Regions in their manufacture.
2. Goods produced in a member state and the CIF values of any foreign (that is COMESA or SADC) materials used does not exceed 60% Of the total cost of all materials used in the production.
3. Goods satisfying the change of tariff heading resulting from their process of manufacture where some raw materials are imported.
4. Goods produced in a member state designated in a list by the council to be of particular importance to the economic development of the member state and containing not less than 25% value added.
5. Goods produced win a member states whose value added resulting from the process of production accounts for at least 35% of the ex-factory cos of the goods.

### (b) The COMESA Customs Union is focused on the following major things:

1. The internal free trade area,
2. Relation with third countries including the application of the Common External Tariff (CET),
3. Trade remedies,
4. Export promotion, and
5. Dispute settlement

(c) Bonded warehouse

(i) A bonded warehouse is a building, an installation or an area licensed in terms of section 55 of the Customs and Excise Act in which goods may be stored without payment of duty. The Commissioner General may determine what kind of goods may be warehoused.

A bonded warehouse may be registered by any one in Zambia provided they follow the laid down regulations.

(ii) The maximum period goods may remain in the warehouse at present is:

1. Two (2) years for goods on which duty and import VAT exceeds K180 or
2. One year for those goods on which duty and import VAT does not exceed K180.

(d) The customs and excise division of ZRA controls all exports to ensure the enforcement of national legislation concerning export prohibition and restrictions.

Restricted goods can only be exported after obtaining an export permit from concerned ministries or relevant government departments.

On the other hand, customs collects information needed for the preparation of national trade statistics.

**END OF SOLUTIONS**



TAXATION PROGRAMME EXAMINATIONS

---

CERTIFICATE LEVEL

---

C6: LAW FOR TAX PRACTITIONERS

---

FRIDAY 17 DECEMBER 2021

---

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 question paper consists of FIVE (5) questions of twenty (20) marks each. You MUST attempt all the FIVE (5) 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. 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.
6. All workings must be done in the answer booklet.
7. Present legible and tidy work.
8. 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.**

## **ANSWER ALL FIVE (5) QUESTIONS**

### **QUESTION ONE**

- (a) Briefly explain the tort of negligence. (5 marks)
- (b) Explain any four (4) functions of the Industrial Relations Court. (8 marks)
- (c) Explain the following:
- (i) Hire-Purchase agreement (4 marks)
  - (ii) Credit Sale (3 marks)

**[Total: 20 Marks]**

### **QUESTION TWO**

- (a) Define restrictive endorsement under negotiable instruments. (3 marks)
- (b) Distinguish a sole trader from a limited company (5 marks)
- (c) Explain briefly the Ultra-vires doctrine (4 marks)
- (d) Define a Sleeping Partner under Partnership Agreements (2 marks)
- (e) State two (2) powers of a receiver in Bankruptcy proceedings (2 marks)
- (f) Explain the doctrine of Subrogation in insurance law. (4 marks)

**[Total: 20 Marks]**

### **QUESTION THREE**

By Power of Attorney dated 17-09-2019, Mubanga gave Chansa authority to dispose off his vehicles by way of auction sale. He sold 17 vehicles out of the total number of 22. In 2021, the duo had a misunderstanding and Mubanga wrote to Chansa to cease acting on his behalf but he never received the message. Now Chansa has sold three (3) vehicles to one Mr. Nhamo and the said vehicles have failed to function within hours of purchase. Mr. Nhamo is furious and has commenced legal action against Mubanga and Chansa for fraudulent misrepresentation.

Chansa argues that he has nothing to do with the deal as he had directed Chansa to stop acting on his behalf. Chansa is adverse to this and maintains that he acted for Mubanga in good faith.

**Required:**

- (a) Explain to the parties their rights and obligations based on the facts above. (8 marks)
  - (b) List and briefly explain any three (3) duties of an agent and three (3) duties of a principal in an agency relationship. (5 marks)
  - (c) Explain the significance of judicial decisions in common law jurisdictions. (3 marks)
  - (d) Explain termination of agency by operation of law (4 marks)
- [Total: 20 Marks]**

**QUESTION FOUR**

- (a) Explain the requirements for a contract of Sale as provided for under the Sale of Goods Act 1893. (5 marks)
  - (b) Explain the elements of *res ipsa loquitur* (5 marks)
  - (c) State the two (2) available remedies for an unpaid carrier. (2 marks)
  - (d) Distinguish Higher Purchase from instalment Purchase (8 marks)
- [Total 20 marks]**

**QUESTION FIVE**

- (a) Explain your understanding of the term "Law" (4 marks)
  - (b) Write notes on the following:
    - (i) The literal Rule of statutory interpretation. (5 marks)
    - (ii) Context Rule of statutory interpretation. (3 marks)
  - (c) In an employment contract, explain the four (4) main duties of an:
    - (i) employer towards his employee (4 marks)
    - (ii) employee towards his employer (4 marks)
- [Total: 20 Marks]**

**END OF PAPER**

## **C6: LAW FOR TAX PRACTITIONERS SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

(a) By definition, a tort of negligence is an act of recklessness of the other party. It results in breach of duty of care owed to the Plaintiff by the Defendant. It is the breach of that duty which amounts to negligence. It is a civil wrong, and normally between individuals, whose remedy is compensation. The elements of tort are; Duty, breach of duty, causation, and injury. In order to claim damages, there must be a breach in the duty of the defendant towards the plaintiff, which results in an injury.

(b) The following are the functions of the Industrial relations Court:

To inquire into and make awards and decisions in collective disputes and any other matter under the Act

To interpret the terms or awards, collective agreements and recognition agreements

To inquire into and adjudicate upon matters affecting various employment issues such as employees' rights and obligations.

To commit and punish for any contempt made against the court.

To perform such acts and carry out such duties as may be prescribed under the Act. Any 4 of the above

(c)

(i) Hire Purchase agreement is an agreement where the purchaser agrees to buy goods through instalment payments. The goods bought on hire purchase always remain the property of the sellers until the purchaser has completely made the payments due on the hire purchase agreement. In a hire purchase agreement the seller is therefore entitled to the sold goods.

(ii) Credit sale agreement is an agreement where the seller sales goods on promise by the buyer to pay at a later date. In a credit sale agreement, the seller is entitled to recovery of the credit sale price and not the sold goods.

## SOLUTION TWO

- (a) A restrictive endorsement is one where the endorsement prohibits further transfer of the cheque with the holder not having the power or authority to transfer their right to payment.
- (b) A sole proprietorship, also known as the sole trader, individual entrepreneurship or proprietorship, is a type of enterprise that is owned and run by one person and in which there is no legal distinction between the owner and the business entity. A sole trader does not necessarily work 'alone'—it is possible for the sole trader to employ other people while a limited liability company is a form of a private limited company which is duly incorporated and can stand on its own . Its members enjoy limited liability. It is a business structure that can combine the pass-through taxation of a partnership or sole proprietorship with the limited liability of a corporation.
- (c) Ultra vires is a Latin phrase used in law to describe an act which requires legal authority but is done without it. Its opposite is an act done under proper authority, is intra vires. Acts that are intra vires may equivalently be termed "valid", and those that are ultra vires termed "invalid".
- (d) A **sleeping partner** is a person who provides some of the capital for a business but does not take an active part in managing the business.
- (e) Perpetual succession as a corporate sole and can sue and be sued
- \*Appoint deputy official receiver
  - \* Administer oath
- (f) Subrogation is the assumption by a third party (such as a second creditor or an insurance company) of another party's legal right to collect a debt or damages. It is a legal doctrine whereby one person is entitled to enforce the subsisting or revived rights of another for one's own benefit. A right of subrogation typically arises by operation of law, but can also arise by statute or by agreement. Subrogation is an equitable remedy, having first developed in the English Court of Chancery. It is a familiar feature of common law systems.



### **SOLUTION THREE**

(a) The law at play here is that of agency, the principal is bound by actions of an agent who acts on his behalf. In the case at hand, the agency was created by law and it is enduring meaning that the principal is bound. Agency by ratification arises where one conducts oneself as to represent the other. The principal is still bound in the case at hand due to the fact there was apparent authority from him in the previous dealings.

- The person, who is going to give ratification, must be in existence at the time of activity.
- The person who is going to give ratification should have capacity to contract, at the time of activity as well as at the time of ratification.
- Ratification should be given within reasonable period after the activity the concept of reasonable period depends upon nature of the situation.
- Ratification must be absolute. To entire activity ratification is to be given.
- The fact of ratification must be communicated to all parties in connection with the

### **(b) Duties of an agent**

#### **Duty to follow principal's directions or customs**

The first duty of every agent is to act within the scope of the authority conferred upon him and perform the agency work according to the directions given by the principal. When the agent acts otherwise, if any loss be sustained, he must make it good to the principal, and if any profit accrues, he must account for it.

#### **2. Duty to carry out the work with reasonable skill and diligence**

The agent must conduct the business of the agency with as much skill as is generally possessed by persons engaged in similar business, unless the principal has notice of his want of skill. Further, the agent must act with reasonable diligence and to the best of his skill.

If the agent does not work with reasonable care, skill (unless the principal has notice of his want of skill) and diligence, he must make compensation to his principal in respect of 'direct consequences' of his own neglect, want of skill or misconduct. But he is not so liable for indirect or remote losses.

### **3. Duty to Render Accounts**

It is the duty of an agent to keep proper accounts of his principal's money or property and render them to him on demand, or periodically if so provided in the agreement.

### **4. Duty to communicate**

It is the duty of an agent, in cases of difficulty, to use all reasonable diligence in communicating with his principal, and in seeking to obtain his instructions, before taking any steps in facing the difficulty or emergency.

### **5. Duty not to deal on his own account**

An agent must not deal on his own account in the business of agency; i.e., he must not himself buy from or sell to his principal goods he is asked to sell or buy on behalf of his principal; without obtaining the consent of his principal after disclosing all material facts to him.

### **6. Duty not to make any profit out of his agency except his remuneration**

An agent stands in a fiduciary relation to his principal and therefore he must not make any profit (secret profit) out of his agency. He must pay to his principal all moneys (including illegal gratification, if any) received by him on principal's account.

He can, however, deduct all moneys due to himself in respect of his remuneration or/and expenses properly incurred. If his acts are not bonafide, he will lose his remuneration and will have to account for the secret profit to his principal.

### **7. Duty on termination of agency by principal's death or insanity**

When an agency is terminated by the principal dying or becoming of unsound mind, the agent must take, on behalf of the representatives of his late principal, all reasonable steps for the protection and preservation of the interests entrusted to him.

### **8. Duty not to delegate authority**

Subject to six exceptions stated earlier (under the heading Delegation of Authority), an agent must not further delegate his authority to another person, but perform the work of agency himself.

## **DUTIES OF A PRINCIPAL**

### **The principal has three main duties:**

- To honor any contract s/he makes with the agent.
- To deal fairly with the agent.
- To indemnify the agent if following the principal's directions gets the agent in trouble.
- To remunerate the agent
- To indemnify the agent

(c) Judicial precedents make matters predictable. The outcome is easy to arrive at if facts are similar. A precedent is a principle or rule established in a previous legal case that is either binding on or persuasive for a court or other tribunal when deciding subsequent cases with similar issues or facts. Common-law legal systems place great value on deciding cases according to consistent principled rules, so that similar facts will yield similar and predictable outcomes, and observance of precedent is the mechanism by which that goal is attained. The principle by which judges are bound to precedents is known as stare decisis.

(d) An agency can be terminated by operation of law in any of the following cases:

1. Performance of the Contract: When the agency is for a particular object, the agency terminates when the object is fulfilled.
2. Expiry of Time: When an agency is created for a particular period of time, it comes to an end on the expiry of that period even if the work is not completed.
3. Death or Insanity of Either Party: The agency is terminated when the agent or principal dies or becomes insane. On the death of either the agent or the principal, the agency is automatically terminated because a person cannot act on behalf of non-existent person. Thus, where a client dies, his authority also terminates. Similarly, the relationship between agent and principal comes to an end when principal or agent becomes insane, for a person of unsound mind cannot contract.

## **SOLUTION FOUR**

### **(a) The requirements are as follows;**

- There has to be a buyer and a seller
- There has to be transfer or agreement to transfer property
- Intention to be bound
- There has to be money consideration
- The price has to be established
- There has to be goods

**(b) *Res ipsa loquitur*** is a Latin phrase that means "the thing speaks for itself." In personal injury law, the concept of *res ipsa loquitur* (or just "res ipsa" for short) operates as an evidential rule that allows plaintiffs to establish a rebuttable presumption of negligence on the part of the defendant through the use of circumstantial evidence. This means that while plaintiffs typically have to prove that the defendant acted with a negligent state of mind, through *res ipsa loquitur*, if the plaintiff puts forth certain circumstantial facts, it becomes the defendant's burden to prove he or she was not negligent.

### **Below are the key elements;**

- The Defendant was in exclusive control of the situation or instrument
- The injury would not have ordinarily occurred but for the Defendant's negligence
- The Plaintiff's injury was not due to his fault, commission or omission.

**(c)** The carrier has lien over the goods for the freight due until it is paid for or the freight is settled by either the consignor or the consignee. Case of *Booth Steamship Co. Ltd v. Cargo Fleet Iron Co. Ltd.*

**(d)** Both hire purchase and installment sale are popular methods of financing goods. These methods are different to each other in terms of their option to purchase, a right of termination, and transfer of ownership. Hire purchase is defined as an arrangement between hirer (buyer or User) and seller of an asset whereby the seller allows the hirer to use the asset for a regular payment of installment for the purchase price. The buyer also has the option to purchase the goods on payment of all the installments. Whereas installment purchase is defined as another method of

financing the capital goods / assets whereby the goods are purchased by the buyer but the payment is made in smaller installments.

## **SOLUTION FIVE**

(a) Law can be defined as a collection of rules which regulate human conduct. These rules are prescribed by human beings for the obedience of human beings. Law may further be defined as a body of rules; a guidance of human conduct imposed and enforceable at law.

(b) Explanation of rules of interpretation

(i) The Literal Rule – This principle states that words of a statute or any other document must be interpreted according to their natural and primary meaning adding to or taking away nothing from them. Thus if the words of a statute are in themselves precise, clear and unambiguous, no more is necessary than to expound those words in their natural and ordinary sense.

(ii) The Contextual Rule – This is a rule of interpretation that looks at the context words were said or in the light of the terms surrounding it. The most vital rules for the interpretation of statutes are those suggested by common sense. The judge may look up the meaning of a word in a dictionary or technical work, but the ordinary meaning may be controlled by the particular context.

(c ) (i) Employers duty towards employees:

- (a) Duty to pay wages
- (b) Duty to exercise reasonable care towards employees
- (c) Duty to provide grievance procedure
- (d) Duty of mutual trust and confidence towards employees.

(ii) Employees duty towards employers:

- (a) Duty to obey instructions
- (b) Duty to adapt to working conditions stipulated by employer
- (c) Duty to exercise due care when performing employment duties
- (d) Duty to act in good faith when executing employment duties.

**END OF SOLUTIONS**



TAXATION PROGRAMME EXAMINATIONS

---

DIPLOMA LEVEL

---

D1: BUSINESS INFORMATION MANAGEMENT

---

WEDNESDAY 15 DECEMBER 2021

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 question paper consists of **FOUR (4)** questions of Twenty Five (25) marks each. You must attempt all the **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.**

**Answer all FOUR (4) questions.**

**QUESTION ONE**

A Data warehouse is a collection of data designed to support management in decision making. Data warehouse contain a wide variety of data that present a coherent picture of business conditions. An IT firm will be engaged to do the expert works and service to recover a cost benefit investment for an organization.

**Required:**

- (a) Identify the four (4) basic characteristics of data warehouses and explain the benefits that a data warehouse with each of these characteristics would offer to a tax consultancy firm. (8 marks)
- (b) Distinguish between in-sourcing and out-sourcing. Give relevant examples of when each is best to be used. (12 marks)
- (c) Explain the role DBMS in an Accounting Information System. (5 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

- (a) The physical environment has a major effect on IS security and planning for it properly is an important precondition of an adequate security plan.

Identify any five (5) hazards to a computer system in a business firm. (10 marks)

The phases of a project can be broken down into a number of stages, which depends on a type of project and the conversion of the organisation undertaking the project.

- (b) Explain the five (5) stages of the project development life cycle. (10 marks)
- (c) Elaborate the benefits of using bespoke software in handling accounting activities. (5 marks)

**[Total: 25 Marks]**

**QUESTION THREE**

- (a) Use of ICTs in management of data and channels of communication has made it easy to run business and also helped cut certain costs in businesses. When making decisions in business, many aspects should be considered.

**Required:**

State five (5) characteristics of Group Decision Support Systems (GDSS) (5 marks)

- (b) Online businesses have grown in number. So many different activities bordering on sales of goods and services are happening online.



**Required:**

Explain in detail five (5) benefits of the internet, including a drawback for each of the benefits (10 marks)

- (c) Testing of an information which has just been implemented in an organization is vital phase of the system development process.

**Required:**

Discuss what user acceptance tests are, in your explanation clearly outline the goal of these test, who carries them out and how they are done. (10 marks)

**[Total: 25 Marks]**

**QUESTION FOUR**

- (a) The original concept of an audit trail is to enable a manger or auditor to follow transactions stage-by-stage through a system to ensure that they had been processed correctly.

**Required:**

Explain what an Audit trail is and identify any four (4) typical contents of an accounting software packager audit trail. (10 marks)

- (b) Interviews are used in investigating and recording user requirement.

**Required:**

Distinguish between structured and unstructured interviews. (4 marks)

- (c) State a software application that is used to record information and keep track of a project implementation. (2 marks)

- (d) Explain the primary goal of the post-implementation activities for an organization that has just implemented a new information system? (2 marks)

- (e) The Project Manager usually has one responsibility, the project. Most people in business will have 'normal work' responsibilities outside their project goals, which may lead to conflicting demands on their time.

Outline any seven (7) responsibilities of a Project Manager. (7 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## **D1 BUSINESS INFORMATION MANAGEMENT SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

(a) Any four of the following can be given as answers:

- (i) Data are organized by subject (for example, by customer, vendor, product, price level, and region). As a result, the analyses performed by users are intuitive because the dimensions are labelled in business terms.
- (ii) Data warehouses and data marts use online analytical processing (OLAP), which involves the analysis of accumulated data by end users. OLAP allows users to "drive" their own data analyses and to examine data in unique ways to improve job performance.
- (iii) Data are collected from multiple systems and are integrated around subjects. For example, customer data may be extracted from internal (and external) systems and integrated around a customer identifier to create a comprehensive view of the customer.
- (iv) Data warehouses and data marts maintain historical data (i.e., they include time as a variable). A data warehouse or mart may store years of data. Historical data are needed to detect trends, deviations and long-term relationships.
- (v) Data warehouses and data marts are non-volatile-no one can change or update the data. Non volatility means that the warehouse or mart reflects history, which is critical for trend analysis.

(b) Discuss in-sourcing and out-sourcing

Some believe outsourcing is not the best solution for today's environment. In-sourcing involves recruiting IS/IT staff internally, from other areas of the business, and teaching these business-savvy employees about technology. The logic behind the idea is that it is easier (and cheaper) to teach technical skills to business people than to teach business skills to technical people.

Possible advantages include:

- 1 Creating a better quality workforce that combines both technical and business skills.
- 2 Reduce costs.
- 3 Improve relationships and communication between IT staff and other departments

4 Increase staff retention – through providing an additional career path.

Out-sourcing is really the opposite. This is when organizations would prefer to transfer the work details and the needed expertise to an external entity.

Possible advantages include:

- 1 Sometimes employees do not need to pick up the IS/IT skills required thereby saving costs.
- 2 The external may be better trained to make the change.
- 3 Details of day to day operations are hidden

**(c) DBMS** is a system software that is used to manage databases.

- It is used to create, modify and update the data in the database.
- It also controls access to the data and provides access rights.
- Anyone accessing the data in the database goes through the DBMS

## **SOLUTION TWO**

(a) Hazards to computer system

- (i) Fire – destruction of data and more costly
- (ii) Water – flooding and water damage are encountered
- (iii) Weather – wind, rain & storm can cause damage to buildings
- (iv) Lightning – this can cause power failure coupled with power surge
- (v) Accidental damage – improper installation, trip over cables or spill of liquids

(b) Stages of the project cycle are

- **Initiation**

- Project identified
- Business case developed
- Statement of work

- **Planning**

- Creating a project plan:
- Creating workflow diagrams:
- Estimating budget
- Gathering resources:
- Anticipating risks
- Holding a project kickoff meeting

- **Execution**

- Creating tasks and organizing workflows:
- Briefing team members on tasks:
- Communicating with team members, clients, and upper management:
- Monitoring quality of work:
- Managing budget

- **Closure**

- Analyzing project performance:
- Analyzing team performance:
- Documenting project closure:
- Conducting post-implementation reviews
- Accounting for used and unused budget

(c) Using bespoke software

- Bespoke software is intended for the operations, therefore being more convenient
- Bespoke software has particular support from the supplying vendor or company

- Bespoke Software is produced together with the need, making it specific and helpful
- Bespoke Software is produced according to your budget
- Bespoke can be changed as the business needs evolve

## **SOLUTION THREE**

### **(a) Characteristics of GDSS**

- Easy to use
- Flexible
- Automated record keeping
- Parallel communication
- 

### **(b) Benefits of Internet**

- **Sharing Information**

You can share information with other people around the world. The scientist or researchers can interact with each other to share knowledge and to get guidance etc. Sharing information through Internet is very easy, cheap and fast.

- **Collection of Information**

A lot of information of different types is stored on the web servers on the Internet. It means that billions of websites contain different information in the form of text and

You can communicate with other through Internet around the world. You can talk by watching to one another;

- **Entertainment**

Internet pictures. You can easily collect information on every topic of the world. For this purpose, special software, called search engines are available on the Internet to search information of every topic of the world. The most popular search engines are altavista.com, search.com, yahoo.com, ask.com etc. The scientists, writers, engineers and many other people use these search engines to collect latest information for different purposes. Usually, the information on the Internet is free of cost. The information on the Internet is available 24 hours a day.

- **News**

You can get latest news of the world on the Internet. Most of the newspapers of the world are also available on the Internet. They have their websites from where you can get the latest news about the events happening in the world. These websites are periodically updated or they are immediately updated with latest news when any event happens around the world.

- **Searching Jobs**

You can search different types of jobs all over the world, Most of the organizations/departments around the world, advertise their vacant vacancies on the Internet. The search engines are also used to search the jobs on Internet. You can apply for the required job through Internet.

- **Advertisement**

Today, most of the commercial organizations advertise their product through Internet. It is very cheap and efficient way for the advertising of products.

The products can be presented with attractive and beautiful way to the people round the world.

- **Communication**

also provides different type of entertainments to the people. You can play games with other people in any part of the world. Similarly, you can see movies, listen music etc. You can also make new friends on the Internet for enjoyment.

- **Online Education**

Internet provides the facility to get online education. Many websites of different universities provide lectures and tutorials on different subjects or topics. You can also download these lectures or tutorials into your own computer. You can listen these lectures repeatedly and get a lot of knowledge. It is very cheap and easy way to get education.

- **Online Results**

Today, most of the universities and education boards provide results on the Internet. The students can watch their results from any part of country or world.

- **Online Airlines and Railway Schedules**

Many Airline companies and Pakistan Railway provide their schedules of flights and trains respectively on the Internet.

## **Drawbacks of Internet**

Although Internet has many advantages but it also has some disadvantages. The main disadvantages are:

- **Viruses**

Today, Internet is the most popular source of viruses. Most of the viruses move from one computer to another through e-mail or when information is downloaded on the Internet. These viruses create different problems in your computer. For example, they can affect the performance of your computer and damage valuable data and software stored in your computer.

- **Security Problems**

The valuable websites can be damaged by hackers and your valuable data may be deleted. Similarly, confidential data may be accessed by unauthorized persons.

- **Filtration of Information**

When a keyword is given to a search engine to search information of a specific topic, a large number of related links are displayed. In this case, it becomes difficult to filter out the required information.

- **Accuracy of Information**

A lot of information about a particular topic is stored on the websites. Some information may be incorrect or not authentic. So, it becomes difficult to select the correct information. Sometimes you may be confused.

- **Wastage of times**

Personnel may waste a lot of time chatting or playing games instead of been engaged in productive work. At home and offices, most of the people use Internet without any positive purpose.

### **(c) User Acceptance testing**

- System tests are usually conducted by the systems analysts to ensure that all modules and programs work together without error while running in an environment where the system is expected to work in.
- Acceptance tests are done primarily by the users with support from the project team.
- The goal is to confirm that the system is complete, meets the business needs that prompted the system to be developed and is acceptable to the users.
- Acceptance testing is done in two stages:
  - alpha testing: in which users test the system using made-up data,
  - beta testing, in which users begin to use the system with real data and carefully monitor the system for errors.



## SOLUTION FOUR

(a) An audit trail should be provided so that every transaction on a file contains a unique reference e.g sales system transaction record should hold a reference to the customer order, delivery note and invoice.

- Typical contents of an accounting audit trail
  - i. A system generated transaction number
  - ii. A meaningful reference number
  - iii. Transaction type
  - iv. Who input the transaction – user ID
  - v. Full transaction details
  - vi. The PC or terminal used to enter the transaction
  - vii. Date and time of entry

### (b) Type of interviews

i) A **structured interview** is a type of interview in which the interviewer asks a particular set of **predetermined questions**.

In structured interviews, **questions are planned** and created **in advance**, which means that **all candidates** are asked the **same questions** in the **same order**.

An **unstructured interview** is a type of interview in which the interviewer asks **questions** which are **not prepared in advance**.

In unstructured interviews, **questions arise spontaneously** in a free-conversation, which means that **different candidates** are asked **different questions**.

### ii) Advantages

#### Structured interviews

- Each candidate is asked the same questions which leads to easy evaluation.
- They are easy to carry out

#### Unstructured interviews

- Offer a personalised approach
- Help candidates relax

### Disadvantages

#### Structured

- Difficult to develop
- Questions may be known in advance

### **Unstructured**

- Easy to lose track
- Harder to compare results

#### (c) Microsoft Project Management

System tests are usually conducted by the systems analysts to ensure that all modules and programs work together without error while running in an environment where the system is expected to work in.

(d) The goal of post-implementation activities is to institutionalize the use of the new system that is, to make it the normal, accepted, routine way of performing the business processes.

The post-implementation activities attempt to refreeze the organization after the successful transition to the new system. Although the work of the project team naturally winds down after implementation, the business sponsor and, sometimes, the project manager are actively involved in refreezing. These two—and, ideally, many other stakeholders—actively promote the new system and monitor its adoption and usage. They usually provide a steady flow of information about the system and encourage users to contact them to discuss issues.

#### (e) Project managers responsibilities

- Ensure resources are used efficiently in terms of cost, time and results
- Keep management informed with timely and accurate communication
- Manage the project to the best of his/her ability
- Maintain a customer orientation
- Take action to keep the project on target for successful completion
- Provide any support required when members leave the team
- Help new team members integrate into the team

**END OF SOLUTIONS**



TAXATION PROGRAMME EXAMINATIONS

---

DIPLOMA LEVEL

---

D2: FINANCIAL MANAGMENT

---

FRIDAY 17 DECEMBER 2021

---

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 question paper consists of **FOUR (4)** questions of Twenty Five (25) marks each. You must attempt all the **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. 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.
6. All workings must be done in the answer booklet.
7. Present legible and tidy work.
8. Graph paper (if required) is provided at the end of the answer booklet.
9. Formulae, Present Value, and Annuity tables are provided at the end of this question paper.

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

**Attempt all FOUR (4) questions**

**QUESTION ONE**

Mwange Manufacturing Ltd is based in the Republic of Zambia and manufactures various computer accessories. The company is considering a potential project involving a critical component used in the central processing unit of computers. The IT Director has prepared the following forecasts:

<b>Year</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Units of Production and sales</b>	4,000	6,031	7,005	5,000	3,019

The project will require manufacturing machinery which cost K600,000 and working capital equal to 12% of annual sales. The selling price per unit is expected to be K150 and variable cost K80 per unit and these are expected to increase by 12% and 9% respectively beginning from year one, due to inflation. The general inflation is predicted as 7%.

The company will be able to claim tax allowable depreciation on the manufacturing machinery at the rate of 50% on a straight-line basis. Company income tax is payable at an annual rate of 35%. Three quarters (75%) of the tax due is paid in the same year and the remaining one quarter (25%) is paid in the following year.

The company has a pre-tax money weighted average cost of capital of 16%.

The newly appointed Managing Director, who is not an accountant, has asked you to appraise the project and also explain the role of financial management and the decisions involved in financial management. The manufacturing machinery is expected to have a scrap value of K50,000 after five (5) years.

**Required:**

- (a) Explain the following:
- (i) Role of financial management in the private sector. (2 marks)
  - (ii) Investment decisions, financing decisions and dividend decisions in financial management. (4 marks)
- (b) Calculate the Net Present Value (NPV) of the project and advise whether the project is worthwhile, clearly giving your reasons. (19 marks)

**[Total: 25 marks]**

## **QUESTION TWO**

You are a Financial Analyst and one of your clients is seeking your assistance regarding sources of finance and cost of capital. The client is listed on the Lusaka Securities Exchange (LuSE) and has a dividend pay-out ratio of 30%. The earnings per share (EPS) is K5 and the capital structure of the client is as follows:

	<b>K</b>
Equity:	
Ordinary shares K0.25 each	500,000
Share premium	100,000
Retained earnings	200,000
<b>Total</b>	<b>800,000</b>
Non-current liabilities:	
8% Convertible debentures	2,500,000
13% Bank loan	700,000
<b>Total</b>	<b>3,200,000</b>
<b>Grand Total</b>	<b>4,000,000</b>

The ordinary shares are current quoted at K20 cum-div. The company's return on investment is 20%. The ordinary share price is expected to be K30 ex-div in four (4) years' time.

The 8% Convertible debentures are redeemable at their par value of K200 or converted into six (6) ordinary shares in four (4) years' time. The current market value of the 8% Convertible debentures is K190.

The company pays company income tax at 30% per annum.

### **Required:**

- (a) Explain any five (5) factors that influence the choice of equity and debt finance.  
(5 marks)
- (b) Discuss any three (3) benefits of using retained earnings as a source of finance.  
(3 marks)
- (c) Calculate the Weighted Average Cost of Capital. (WACC) (14 marks)
- (d) Explain any three (3) limitations of using the Capital Asset Pricing Model (CAPM) as a way of estimating the cost of equity. (3 marks)

**[Total: 25 marks]**

### **QUESTION THREE**

Namwala Mining Plc was incorporated several years ago to undertake mining operations within the Southern Province. On 1 April 2020, it acquired 60% ordinary shares in Kafue Ltd, a company involved in smelting and refining of copper, and 100% ordinary shares in Mweru Ltd, a company which specialise in the export of copper.

Namwala Mining Plc is seen as a potential target for acquisition by multinational companies. However, the value of the company has been a matter of public debate in recent weeks and the following financial information is available:

#### **Statement of profit or loss (extracts) for the years ended 31 March**

<b>Year</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Profit before tax (K'000).	130,000	115,000	140,000	134,000	145,000
Income tax (K'000).	20,000	40,000	30,000	12,000	25,000
Total dividends (K000).	50,000	35,000	55,000	60,000	75,000

#### **Statement of financial statement position (extract) as at 31 March 2021**

	<b>K'000</b>
Non-current assets	400,000
Current assets	300,000
Non-current liabilities	200,000
Current liabilities	260,000

The company's earnings yield is 15% and the cost of equity is 19%. The two subsidiaries declared a final dividend before the year end. However, the operations have been adversely affected by the COVID-19 pandemic and there is a possibility that goodwill arising on consolidation could be impaired. The growth rate in dividends has been computed as 6%.

#### **Required:**

- (a) Explain the following:
- (i) Basic procedure for preparing the consolidated statement of financial position. (3 marks)
  - (ii) Accounting treatment of impairment of goodwill arising on consolidation. (4 marks)
  - (iii) Accounting treatment of dividend paid by the subsidiaries. (4 marks)
- (b) Calculate the value of equity as at 31 March 2021 using the following methods:

- (i) Net asset basis method. (3 marks)
- (ii) Earnings yield method. (2 marks)
- (iii) Dividend growth model. (3 marks)
- (c) Discuss whether it is possible to predict corporate failure. (6 marks)

**[Total: 25 marks]**

**QUESTION FOUR**

At a recent board meeting, the Board of Directors of Samahina Ltd considered the following:

**1. Company’s cash management**

The Finance Director was in favour of the Miller-Orr Model, arguing that it is easy to operate and can be delegated to junior Managers. However, the Audit Committee Chairperson was in favour of the Baumol Model, arguing that it is a good compliment to the economic order quantity (EOQ) which the company was currently using in the management of inventory.

After much debate, the Board of Directors resolved to introduce the Miller-Orr Model and set K9,000 as the minimum cash balance. The average cost to the company of making deposits or selling investments is K500 per transaction and the variance of the cashflows is K8,000,000 per day. The average interest rate on investment per annum is 22%.

**2. Project appraisal processes**

The company’s capital budgeting system is considered to be a total failure and as a starting point, the Board of Directors has requested for advice on the steps used in project appraisal.

**3. Capital rationing**

Samahina Ltd only has K400,000 available for investment and it is considering the following three (3) projects:

<b>Projects</b>	<b>Initial outlay</b>	<b>Net Present Value (NPV)</b>
	<b>K</b>	<b>K</b>
A	340,000	51,000
B	300,000	(15,000)
C	200,000	40,000

All projects are divisible, not mutually exclusive and cannot be postponed.

**Required:**

- (a) Explain the use of the Miller-Orr Model in cash management. (4 marks)
- (b) Calculate the spread, return point and upper limit and formulate the decision rules. (8 marks)
- (c) Advise the Board of Directors on the typical steps used in project appraisal. (6 marks)
- (d) Determine the optimal project selection and calculate the maximum NPV. (7 marks)

**[Total: 25 marks]**

**END OF PAPER**



## Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_n D}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + \left(\frac{1}{3} \times \text{spread}\right)$$

$$\text{Spread} = 3 \left[ \frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{interest rate}} \right]^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i (E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[ \frac{V_e}{(V_e + V_d(1-T))} \beta_e \right] + \left[ \frac{V_d(1-T)}{(V_e + V_d(1-T))} \beta_d \right]$$

The Growth Model

$$P_0 = \frac{D_0(1+g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = b r_e$$

The weighted average cost of capital

$$\text{WACC} = \left[ \frac{V_e}{V_e + V_d} \right] k_e + \left[ \frac{V_d}{V_e + V_d} \right] k_d (1-T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$s_1 = S_0 \times \frac{(1+h_c)}{(1+h_b)} \qquad f_0 = S_0 \times \frac{(1+i_c)}{(1+i_b)}$$

**Present Value Table**

Present value of 1 i.e.  $(1 + r)^{-n}$

Where  $r$  = discount rate  
 $n$  = number of periods until payment

Periods (n)	Discount rate (r)										
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	1
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	2
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	3
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	4
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	5
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	6
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	7
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	8
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	9
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	10
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	11
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	12
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	13
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	14
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	15
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	1
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694	2
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579	3
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482	4
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402	5
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335	6
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279	7
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233	8
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194	9
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162	10
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135	11
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112	12
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093	13
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078	14
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065	15

### Annuity Table

Present value of an annuity of 1 i.e.  $\frac{1 - (1 + r)^{-n}}{r}$

Where  $r$  = discount rate  
 $n$  = number of periods

Periods (n)	Discount rate (r)										
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	1
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	2
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	3
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	4
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	5
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	6
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	7
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	8
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	9
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	10
11	10.37	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	11
12	11.26	10.58	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	12
13	12.13	11.35	10.63	9.986	9.394	8.853	8.358	7.904	7.487	7.103	13
14	13.00	12.11	11.30	10.56	9.899	9.295	8.745	8.244	7.786	7.367	14
15	13.87	12.85	11.94	11.12	10.38	9.712	9.108	8.559	8.061	7.606	15
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	1
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528	2
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106	3
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589	4
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991	5
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326	6
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605	7
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837	8
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031	9
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192	10
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327	11
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439	12
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533	13
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611	14
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675	15

## **D2: FINANCIAL MANAGEMENT SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

#### **(a) Financial management**

##### **(i) Role of financial management in the private sector**

The primary financial objective in the private sector is considered to be maximisation of shareholder wealth. Financial management is the management of finances of an organisation in order for that organisation to achieve its financial objectives. This, however, also involves the consideration of non-financial objectives.

##### **(ii) Decisions in financial management**

###### **1. Investment decisions**

These decisions involve identifying potential investment opportunities, evaluating them and optimally allocating financial resources to enable the profitable investments projects to be undertaken.

Appropriate methods of evaluating investment opportunities such as accounting rate of return (ARR), payback period, net present value (NPV) and internal rate of return (IRR) are used mainly to avoid loss of huge sums of money through poor investment decisions.

###### **2. Financing decisions**

These decisions involve determining the appropriate sources of finance for various purposes, with emphasis on the choice between equity and debt finance and the choice between short term (working capital management) and long-term finance (capital structure) and evaluating the costs of each source of finance. Effective financing decisions could significantly contribute towards maximisation of shareholder wealth.

###### **3. Dividend decisions**

These decisions involve determining the size of dividends to be paid to the shareholders of a company and consideration of whether dividend payments will impact upon the value of a company.

**(b) Computation of net present value (NPV)**

	Years (K'000)						
	0	1	2	3	4	5	6
Investment	(600)						
Scrap value						50	
Cashflows (W1)		323	562	750	616	424	
Tax payments (W2)		(85)	(176)	(246)	(228)	(165)	(37)
Tax savings (W3)		79	105	26		(14)	(4)
Working capital (W4)	<u>(81)</u>	<u>(55)</u>	<u>(41)</u>	<u>35</u>	<u>46</u>	<u>96</u>	
Net cashflows	(681)	262	450	565	434	391	(41)
10% Discount factor (W5)	<u>X 1.000</u>	<u>X 0.909</u>	<u>X 0.826</u>	<u>X 0.751</u>	<u>X 0.683</u>	<u>X 0.621</u>	<u>X 0.564</u>
Present value	<u>(681)</u>	<u>238</u>	<u>371</u>	<u>424</u>	<u>296</u>	<u>243</u>	<u>(23)</u>
NPV (K'000) =	<u>+868</u>						

**Advice**

The project is worthwhile, since the net present value (NPV) is positive. The project will contribute towards maximisation of shareholders' wealth.

**Workings**

**1. Cashflows**

Years	Selling price	Variable cost	Contribution	Units	Cashflows
	K	K	K		K'000
0	150	80			
1	150 X 1.12	80 X 1.09	80.8	4,000	323
2	168 X 1.12	87.2 X 1.09	93.11	6,031	562
3	188.16 X 1.12	95.05 X 1.09	107.13	7,005	750
4	210.74 X 1.12	103.61 X 1.09	123.1	5,000	616
5	236.03 X 1.12	112.93 X 1.09	140.41	3,019	424

## 2. Tax payments (K'000)

Years	Cashflows	Tax @ 35%	75% tax	25% tax	Total tax payment
1	323	113	85		85
2	562	197	148	28	176
3	750	263	197	49	246
4	616	216	162	66	228
5	424	148	111	54	165
6				37	37

## 3. Tax savings (K'000)

Years	Value	Tax savings	75%	25%	Total savings
1 Cost	600				
W&t 50%	<u>(300)</u> X 0.35	105	79		79
2 ITV	300				
W&t 50%	<u>(300)</u> X 0.35	105	79	26	105
ITV	0				
3				26	26
5 Scrap	<u>(50)</u> X 0.35	(18)	(14)		(14)
Balancing charge	<u>(50)</u>				
6				(4)	(4)

## 4. Working capital

Years	Selling price	Units	Sales revenue	Working capital	Investment	
	K		K'000	K'000	K'000	
0	150				(81)	
1	150 X 1.12	168	4,000	672 X 0.12	81	(55)
2	168 X 1.12	188.16	6,031	1,135 X 0.12	136	(41)

3	188.16 X 1.12	210.74	7,005	1,476 X 0.12	177	35
4	210.74 X 1.12	236.03	5,000	1,180 X 0.12	142	46
5	236.03 X 1.12	264.35	3,019	798 X 0.12	96	96

### 5. Discount rate

After tax rate = Pre tax rate X (1 – t)

After tax rate = 16% X (1 – 0.35)

After tax rate = 16% X 0.65)

After tax rate = 10%

## **SOLUTION TWO**

### **(a) Factors that influence the choice equity and debt finance**

#### 1. Cost

Debt is cheaper than equity mainly because from the point of view of the holder, debt is less risky than equity.

#### 2. Financial risk

Raising debt will increase the financial risk since interest may result in less or no profits for the shareholders.

#### 3. Business risk

A company should avoid debt if business risk and/or operational gearing is already high.

#### 4. Cash flows

If the company is not going to be a good cash generator for a while, then it is likely that equity will be more suitable.

#### 5. Security

If a company has good security available, then it may be able to raise more debt.

#### 6. Control

Issuing equity may change control whilst issuing debt will not impact upon control.

#### 7. Track record

If a business/entrepreneur has no track record it may be hard to raise finance and will probably need to find a provider of equity willing to take the high risk.

#### 8. Amount

Raising small amounts by equity is not normally cost effective.

#### 9. Issue

Debt is normally cheaper, easier, and quicker to raise, and has more certainty.

#### 10. Covenants

The covenants attached to debt may not be acceptable and hence a company may prefer equity.

#### 11. Management

Risk averse managers normally prefer equity.



## 12. Negotiability

The existence of a stock market generally makes it easier for companies to access financial resources.

### (b) Benefits of using retained earnings

1. Retained earnings are a regular, ongoing source of funding as long as the company operations remains profitable.
2. Retained earnings are a flexible source of finance – the company is not tied to specific amounts or specific repayments patterns.
3. The use of retained earnings does not change control since the percentages in respect of shareholding are unaffected.
4. The use of retained earnings requires no formal approval from shareholders.
5. There use of retained earnings is relatively cheaper since there are no issue costs.
6. There is no requirement (particularly important for smaller companies) for access to the stock market.
7. The funds are available even if adverse conditions are affecting the stock markets.

### (c) Weighted average cost of capital (WACC)

Capital	Market value	Weighting	Cost of capital	Product
	K'000		%	%
Equity	37,000	0.92	23.2	21.34
8% C/debentures	2,375	0.06	7.3	0.44
13% Bank loan	700	0.02	9.1	0.18
Total	40,075	1.00	WACC	21.96

### Workings

#### 1. Cost of equity

$$\text{Cost of equity (Ke)} = \frac{d_0(1+g)}{P_0} + g$$

$$Ke = 0.30 \times 5 (1 + 0.14)/20 - (0.30 \times 5) + 0.14$$

$$Ke = 1.5 \times (1.14)/20 - 1.5 + 0.14$$

$$Ke = 1.71/18.5 + 0.14$$

$$K_e = 0.09 + 0.14$$

$$K_e = 0.232 \text{ (23.2\%)}$$

## 2. Market value of equity

$$\text{Market value of equity (Ve)} = 500,000 / 0.25 \times 18.5$$

$$\text{Market value of equity (Ve)} = \text{K}37,000,000$$

## 3. Growth in dividends (g)

$$g = bR$$

$$g = 70\% \times 20\%$$

$$g = 14\%$$

## 4. Cost of 8% Convertible debentures

$$\text{Redemption value (par value)} = \text{K}200$$

$$\text{Conversion value} = \text{K}30 \times 6 = \text{K}180$$

Hence, the redemption value will be used in the computation since it is higher than the conversion value.

The Internal Rate of Return (IRR) approach is used to determine the cost of the 8% Convertible debentures.

Year	cashflows	5%	Present	10%	Present
	K	disc. factor	K	disc. factor	K
0	(190)	1.000	(190)	1.000	(190)
1 – 4	11.2	3.546	40	3.170	36
4	200	0.823	165	0.683	137
		NPV	+15		-17

$$\text{*Net interest} = 8\% \times 200 (1 - 0.30)$$

Net interest = 16 X 0,70

Net interest = K11.2

Cost of 8% Convertible debentures (Kd) = 5% + [15/(15 + 17)] X (10 – 5)%

Kd = 5% + [15/32 X 5]%

Kd = 5% + 2.3%

Kd = 7.3%

5. Market value of 8% Convertible debentures

Market value of 8% Convertible debentures = 2,500,000/200 X 190

Market value of 8% Convertible debentures = K2,375,000

6. Cost of Bank loan

Cost of Bank loan = 13% X (1 – 0.30)

Cost of Bank loan = 13% X 0.70

Cost of Bank loan = 9.1%

7. Value of Bank loan

Value of Bank loan = Book value

Value of Bank loan = K700,000

#### **(d) Limitations of the Capital Asset Pricing Model (CAPM)**

1. The project discounting rate calculated may not be appropriate for the entire life of the project as CAPM is a single period model.
2. CAPM assumes that only systematic risk should be captured since unsystematic risk can be diversified away.
3. CAPM assumes that risk can be captured in a single figure known as the beta factor.
4. Close comparison with a proxy company is difficult as it assumes close similarity of activities and business risk.
5. All information is freely available to investors and they are competent in interpreting that information.
6. Investors are able to borrow and lend at risk free rate.

## **SOLUTION THREE**

### **(a) Explanations**

#### **(i) Basic procedure for preparing the consolidated statement of financial position**

- The carrying amount of the parent's investment in each subsidiary and the parent's portion of equity of each subsidiary are eliminated or cancelled
- Non-controlling interests in the net income of consolidated subsidiaries are adjusted against group income, to arrive at the net income attributable to the owners of the parent
- Non-controlling interests in net assets of consolidated subsidiaries should be presented separately in the consolidated statement of financial position

#### **(ii) Accounting treatment of impairment of goodwill arising on consolidation**

There is need for the directors to carry out an impairment review. Since Mweru Ltd is wholly owned by Namwala Mining Plc, any impairment will reduce both the carrying value of goodwill and the retained earnings of the group.

However, in the case of Kafue Ltd, if the non-controlling interest is valued at fair value, the carrying value of goodwill in the statement of financial position includes goodwill attributable to the non-controlling interest.

In this case, the fall in the value of goodwill through impairment must be allocated between the retained earnings of the group and the non-controlling interest.

The allocation will be based on the relative proportions of the shareholding.

#### **(iii) Accounting treatment of dividend paid by the subsidiaries**

Dividends payable by a subsidiary to the parent company should be cancelled on consolidation. Mweru Ltd is a wholly-owned subsidiary and therefore the dividend payment has no effect on the consolidated statement of financial position, because the money remains within the group. It is simply transferred from the subsidiary to the parent, Namwala Mining Plc. However, there is a 40% non-controlling interest in Kafue Ltd and therefore the amount of this dividend payable to the non-controlling interest must be reported as a current liability in the statement of financial position of the group.

### **(b) Valuation of equity**

#### **(i) Net asset basis method**

	K'000
Non-current assets	400,000

Current assets	<u>300,000</u>
Total assets	700,000
Less:	
Non-current liabilities	(200,000)
Current liabilities	<u>(260,000)</u>
Value of equity	<u>240,000</u>

**(ii) Earnings yield method**

Value of equity = Profit after tax X 1/Earning yield

Value of equity = (145,000 – 25,000) X 1/0.15 = K800,000

(iii) Dividend growth model.

Value of equity = Total dividends X (1 + g)/(Ke -g)

Value of equity = 75,000 X (1 + 0.06)/(0.19 – 0.06)

Value of equity = 75,000 X 1.06/0.13

Value of equity = K 611,538

**(c) Possibility of predicting corporate failure**

A number of models have been developed to assist in the prediction of corporate failure. The most well-known failure prediction model is the Z-Score devised in the 1950s by Altman. It is a mathematical model which combines several financial ratios into a predictor of financial failure.

In Altman’s model, a Z-Score of 3 or more indicates a high likelihood of non-failure, 1.8 or less indicates a high likelihood of failure. Analysing financial ratios is a widely-used technique for judging a company’s performance and financial position. It might be supposed that ratio analysis should be capable of providing a forecast of what is likely to happen in the future.

However, all Models have both merits and demerits and should therefore be used with great caution.

## **SOLUTION FOUR**

(a) Use of the Miller-Orr Model in cash management

Merton Miller and Daniel Orr developed a model for setting the target cash balance which incorporates uncertainty in the cash inflows and outflows. They assumed that the distribution of daily net cash flows is approximately normal. Each day, the net cash flow could be the expected value or some higher or lower value drawn from a normal distribution. Thus, the daily net cash flow follows a trendless random walk.

The model sets higher and lower control limits, H and L, respectively, and a target cash balance, Z. When the cash balance reaches H, then H – Z kwachas are transferred from cash to marketable securities, that is the firm buys H – Z kwachas of securities.

Similarly, when the cash balance hits L, the Z – L kwachas are transferred from marketable securities to cash.

The lower limit, L is set by management depending upon how much risk of a cash shortfall the firm is willing to accept, and this, in turn, depends both on access to borrowings and on the consequences of a cash shortfall.

(b) Computation of the spread, return point and upper limit and formulate the decision rules

$$\text{Spread} = 3 \left( \frac{3}{4} \times \text{transaction cost} \times \text{variance of cashflows} / \text{interest rate} \right)^{1/3}$$

$$\text{Spread} = 3 \left( \frac{3}{4} \times 500 \times 8,000,000 / 0.0006 \right)^{1/3}$$

$$\text{Spread} = \underline{\text{K51,299}}$$

$$\text{*Interest per day} = 22\% / 365$$

$$\text{Interest per day} = \underline{0.06\%}$$

$$\text{Return point} = \text{Lower limit} + (1/3 \times \text{Spread})$$

$$\text{Return point} = 9,000 + (1/3 \times 51,299)$$

$$\text{Return point} = 9,000 + 17,100$$

$$\text{Return point} = \underline{\text{K26,100}}$$

$$\text{Upper limit} = \text{Lower limit} + \text{Spread}$$

$$\text{Upper limit} = 9,000 + 51,299$$

$$\text{Upper limit} = \underline{\text{K60,299}}$$

**Decision rules:**

1. If the cash balance reaches K9,000, sell securities worth K17,100 (26,100 – 9,000).
2. If the cash balance reaches K60,299, buy securities worth K34,199 (60,299 – 26,100).

**(c) Steps involved in Project appraisal****1. Initial investigation of the proposal**

A decision must be made as to whether the project is technically feasible and commercially viable. This involves assessing the risks and deciding whether the project is in line with the company's long-term strategic objectives.

**2. Detailed evaluation**

A detailed investigation will take place in order to examine the projected cash flows of the project. Sensitivity analysis is performed and sources of finance will be considered.

**3. Authorisation**

For significant projects, authorisation must be sought from the company's senior management and board of directors. This will take place once such persons are satisfied that a detailed evaluation has been carried out, that the project will contribute to profitability and that the project is consistent with the company strategy.

**4. Implementation**

At this stage, responsibility for the project is assigned to a project manager or other responsible person. The resources will be made available for implementation and specific targets will be set.

**5. Project monitoring**

Now the project has started, progress must be monitored and senior management must be kept informed of progress. Costs and benefits may have to be re-assessed if unforeseen events occur.

**6. Post-completion audit**

At the end of the project, an audit will be carried out so that lessons can be learned to help future project planning.

**(d) Optimal project selection**

Projects Initial outlay Net Present Value (NPV) Profitability Index (PI) Ranking

	K	K		
A	340,000	51,000	$51,000/340,000 = 0.15$	2
B	300,000	(15,000)	Not worthwhile	
C	200,000	40,000	$40,000/200,000 = 0.20$	1

	K	NPV K
Available funds	400,000	
Project		
C	<u>(200,000)</u>	40,000
	200,000	
A	<u>(200,000)</u>	<u>30,000*</u>
	<u>0</u>	
Maximum NPV		<u>70,000</u>

\*  $200,000/340,000 \times 51,000 = \underline{K30,000}$

**END OF SOLUTIONS**





TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D3: BUSINESS TAXATION

WEDNESDAY 15 DECEMBER 2021

---

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 consists of **FOUR (4)** questions of twenty five (25) marks each. You MUST attempt all the **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. You must write ALL your answers in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. A taxation table is provided on pages 2, 3, 4, 5 and 6 of this paper.

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

## Taxation table for paper D3– Business Taxation (2021 Examinations)

### Income Tax

#### Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

#### Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

#### Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%
On income from manufacture of products made out of copper cathodes	15%

### Mineral Royalty

#### Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US\$4,500	5.5% of norm value
From US\$4,500 to less than US\$6,000	6.5% of norm value
From US\$6,000 to less than US\$7,500	7.5% of norm value
From US\$7,500 to less than US\$9,000	8.5% of norm value
From US\$9,000 and above	10% of norm value

#### Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

## Capital Allowances

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

Wear and Tear Allowance –	Plant used normally	25%
	Used in Manufacturing and Leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

### Non- commercial vehicles

Wear and Tear Allowance	20%
-------------------------	-----

### Industrial Buildings:

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

### Low Cost Housing (Cost up to K20,000)

Wear and Tear Allowance	10%
Initial Allowance	10%

### Commercial Buildings

Wear and Tear Allowance	2%
-------------------------	----

### Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

## Presumptive Taxes

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

### Presumptive Tax for Transporters

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

## Property Transfer Tax

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

## Value Added Tax

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

### Customs and Excise duties on used motor vehicles

<b>Motor vehicles for the transport of ten or more persons, including the driver</b>	<b>Aged 2 years but below 5 years</b>		<b>Aged 5 years and over</b>	
	<b>Customs duty K</b>	<b>Excise duty K</b>	<b>Customs duty K</b>	<b>Excise duty K</b>
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0
<b>Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars</b>				
	<b>Aged 2 years but below 5 years</b>		<b>Aged 5 years and over</b>	
	<b>Customs duty K</b>	<b>Excise duty K</b>	<b>Customs duty K</b>	<b>Excise duty K</b>
<b>Sedans</b>				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
<b>Hatchbacks</b>				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
<b>Station wagons</b>				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc but not exceeding 2500 cc	22,561	29,329	18,049	23,463

**SUVs**

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

**Aged 2 years but below 5 years****Aged 5 years and over****Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):**

Customs duty	Excise duty	Customs duty	Excise duty
K	K	K	K

**Single cab**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, <b>with spark ignition internal combustion piston engine</b>	30,697	13,302	24,119	10,452

**Panel Vans**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601

**Trucks**

GVW up to 2 tonnes	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,461	0
GVW exceeding 20 tonnes, <b>with spark ignition internal combustion piston engine</b>	37,086	28,432	13,907	10,662

**Surtax****On all motor vehicles aged more than five (5) years from year of manufacture**

K2,000

## Customs and Excise on New Motor vehicles

### Duty rates on:

- 1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:**

**Customs Duty:**

Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000

**Excise Duty:**

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%
  
- 2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:**

**Customs Duty**

Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000

**Excise Duty:**

Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
--	-----
  
- 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%
--	----

**Attempt ALL FOUR (4) questions**

**QUESTION ONE**

Tajima Limited is a Zambian resident company which obtained a license for the mining of base metals two (2) years ago and is currently involved in the mining of copper and cobalt. The following is a summarised statement of profit or loss for the year ended 31 December 2021:

		K'000	K'000
Sales	(Note 1)		158,600
Less cost of sales			<u>(51,300)</u>
Gross profit			107,300
Other income	(Note 2)		<u>25,600</u>
			132,900
<i>Less expenses:</i>			
Mineral royalty	(Note 1)	9,700	
Depreciation		3,200	
Repairs and renewals	(Note 3)	7,500	
Patent royalty	(Note 4)	4,500	
Professional fees	(Note 5)	6,400	
Exchange loss	(Note 6)	300	
General expenses	(Note 7)	<u>8,100</u>	
			<u>(39,700)</u>
Net profit			<u>93,200</u>

**The following information is also relevant:**

1. **Sales**

The figure for sales shown is the norm value of the minerals sold during the year for the purpose of mineral royalty. The amount for mineral royalty paid during the year in the statement of profit or loss above is based on sales for the year.

2. **Other income**

Included in other income is dividends received of K6,900,000 from Kajemu Precious Metals Limited, a Zambian resident company based in Central Province, bank interest of K13,600,000 and treasury bills interest of K5,100,000. These amounts are net amounts in each case; withholding tax was deducted at source.

3. **Repairs and renewals**

Repairs and renewals consist of:

	K'000
Construction of a road outside the mine area	3,100
Repairs to the mine clinic	1,500
Repairs to a mining processing equipment	2,400
Other allowable repairs	<u>500</u>
	<u>7,500</u>

4. **Patent royalty**

Tajima Limited acquired a patent used in copper smelting for a period of ten (10) years and the whole amount has been charged to the statement of profit or loss.

5. **Professional fees**

The professional fees consist of:

	K'000
Audit fees	300
Legal fees for recovery of loan from former employee	1,100
Legal fees for the recovery of bad debts relating to trade debts	2,300
Legal fees in connection with a court action for not complying with environmental legislation	1,300
Legal fees in connection with issue of debentures	<u>1,400</u>
	<u>6,400</u>

**Note:** The legal fees in connection with the issue of debentures shown above, relate to a debenture loan which was issued on 1 October 2021 to finance mining operations. The first interest payment will be due on 30 September 2022.

6. **Exchange loss**

The whole loss arises from the translation of a US\$ account into Zambian Kwacha on 1 January 2021 and end of the year on 31 December 2021.

7. **General expenses**

	K'000
Reconditioning of second hand mining equipment, purchased in May 2021 for K118,200 to render it usable	1,800
Donations to national charity (approved)	700
Donation to political party	4,800
Gifts of 2,500 diaries to local businesses valued at K320 per customer in January 2021 displaying business name	<u>800</u>
	<u>8,100</u>

8. Tajima Limited incurred a loss from mining of US\$15,500,000 in the year ended 31 December 2020. The average Bank of Zambia (BOZ) US Dollar to Zambian Kwacha mid-rate for the year ended 31 December 2020 was K20.50. The BOZ US Dollar to Zambian Kwacha mid-rate was K21.40 for the year ended 31 December 2021.

9. The following formula can be used to index mining losses:

$$1 + \frac{(R2 - R1)}{R1} \times \text{Tax loss brought forward}$$



**Required:**

- (a) (i) Calculate the taxable mining profits for the tax year 2021. (10 marks)
- (ii) Show the amount of the mining loss that will be relieved against mining profits of the year ended 31 December 2021, and the amount of the unrelieved loss to be carried forward as at 31 December 2021. (3 marks)
- (b) Calculate the company income tax payable on the mining profits for the tax year 2021. (7 marks)
- (c) The mining sector has been the major driver of the Zambian economy and has contributed substantially to the national treasury by way of taxes.

**Required:**

State any five (5) tax incentives provided to mining companies. (5 marks)

**[Total: 25 marks]**

**QUESTION TWO**

Antelope Ltd holds 100% of the share capital in each of three (3) companies; Gazelle Ltd, Impala Ltd and Kudu Ltd. Antelope Ltd, Gazelle Ltd and Impala Ltd are all resident in Zambia while Kudu Ltd is resident in a foreign country known as Eastland.

For the year ended 31 December 2021, the companies' sales revenue and purchases and expenses were as follows:

	<b>Antelope Ltd</b>	<b>Gazelle Ltd</b>	<b>Impala Ltd</b>	<b>Kudu Ltd</b>
	K'000	K'000	K'000	K'000
Sales Revenue	342,000	315,000	175,000	242,250
Purchases and expenses	183,750	133,500	91,500	81,975

All the companies are registered for Zambian VAT where applicable and all the amounts are exclusive of VAT where applicable. 80% of Antelope Ltd's supplies are standard rated while the remainder are exempt supplies. All of the supplies made by Gazelle Ltd are zero rated while all of the supplies made by Impala Ltd are exempt supplies. Kudu Ltd makes only standard rated supplies of communications services, 30% of which are made to Antelope Ltd, Gazelle Ltd and Impala Ltd in equal proportions. Kudu Ltd does not have a tax paying agent in Zambia. The purchases and expenses for all the companies are standard rated.

**The following information is also available:**

- (1) During the year, Antelope Ltd sold standard rated goods worth K1.125 million to Gazelle Ltd. This transaction has not been included in the sales revenue of Antelope Ltd and in the purchases and expenses of Gazelle Ltd shown above.
- (2) Antelope Ltd charges management fees of K30 million to Gazelle Ltd and K26.25 million to Impala Ltd to cover the costs of the central treasury function. The amounts of management fees are not included in the sales revenue of Antelope Ltd and in the purchases and expenses of both Gazelle Ltd and Impala Ltd.
- (3) Antelope Ltd incurred standard rated overheads of K67.5 million which have are not been included in the purchases and expenses of Antelope Ltd shown above.
- (4) During the year, Gazelle Ltd transferred a commercial plot of land to Antelope Ltd as part of the internal reorganization of the group. At the time of transfer, the plot of land was valued at K2 million. Following this transfer of the plot of land, Antelope Ltd will transfer the whole of its shareholding in Gazelle to Kudu Ltd. It is estimated that at the proposed time of transfer, the shareholding will be valued at K72 million.

**Required:**

- (a) Calculate the Zambian VAT position of each of the companies **Antelope Ltd, Gazelle Ltd, Impala Ltd** and **Kudu Ltd**, for the year ended 31 December 2021 and show the net VAT position for the group. (16 marks)
- (b) Advise on the VAT implications of the supplies of services made by Kudu Ltd to Antelope Ltd, Gazelle Ltd and Impala Ltd, supported by appropriate calculations. (4 marks)
- (c) Advise Impala Ltd of the property transfer tax implications of the transfer of the commercial plot of land to Gazelle Ltd. (2 marks)
- (d) Advise on the Company Income Tax, Value Added Tax and Property Transfer Tax implications of the proposed transfer of Antelope Ltd's shareholding in Gazelle Ltd to Kudu Ltd. (3 marks)

**[Total: 25 marks]**

### **QUESTION THREE**

You are a Tax Senior in Katongo Chartered Accountants. One of your firm's client Aspire Plc, a VAT registered business wishes to raise capital to finance the acquisition of capital assets, as well as finance the company's ambitious expansion programme to other parts of Zambia. The company's Directors wish to know the nature of each one of the following financing methods and the taxation implications for the company arising from each method:

- |       |                     |           |
|-------|---------------------|-----------|
| (i)   | Operating leases    | (5 marks) |
| (ii)  | Finance leasing     | (6 marks) |
| (iii) | Sale and lease back | (8 marks) |
| (iv)  | Convertible debt    | (6 marks) |

#### **Required:**

Prepare notes to be used in a meeting with the directors describing the **nature** of each one of the above financing methods and the **taxation implications** for Aspire Plc of using each option. **[Total: 25 marks]**

### **QUESTION FOUR**

Tiza, Niza and Wiza, have run a partnership business engaged in farming known as Tiniz Farms for many years sharing profits and losses in the ratio of 5:2:1 respectively after allowing for salaries of K280,000 for Tiza K260,000 for Niza and K240,000 for Wiza.

The summarised statement of profit or loss for the year ended 31 December 2021 is presented below:

	<b>Note</b>	<b>K</b>	<b>K</b>
Gross profit			2,909,000
Other income:			
Profit on sale of farm equipment		16,000	
Discount received		<u>800</u>	
			<u>16,800</u>
			2,925,800
<i>Expenses</i>			
Entertainment expenses	(1)	63,200	
Professional fees	(2)	57,000	
Salaries and wages	(3)	1,646,000	
Motor vehicle running expenses	(4)	88,000	
General expenses	(5)	<u>754,600</u>	
			<u>(2,608,800)</u>
Net profit			<u><u>317,000</u></u>

**Note 1: Entertainment expenses**

These include expenditure incurred on:

	<b>K</b>
	43,200
Entertainment expenses for partners (K14,400 for each partner)	
Gifts of Tiniz Farms branded milk, to customers worth K160 each	16,000
Gifts of farm produce to employees worth K200 each	<u>4,000</u>
	<u>63,200</u>

**Note 2: Professional Fees**

These include expenditure incurred on:

	<b>K</b>
Subscriptions to Farmer's Co-operative Society	14,600
Partner's subscriptions to golf club (K3,000 for each partner)	9,000
Legal fees incurred to transfer title to newly acquired partnership farm land	15,000
Legal fees incurred on collection of trade debts	<u>18,400</u>
	<u>57,000</u>

**Note 3: Salaries and wages**

These included:

	<b>K</b>
Loans to employees written off	20,300
Loans to former employees previously written of now recovered	(7,500)
Partner's salaries	780,000
Salaries for farm employees	<u>853,200</u>
	<u>1,646,000</u>

**Note 4: Motor vehicle running expenses**

These include motor car running expenses of K38,000 incurred on motor vehicles used by employees wholly and exclusively for business purpose, the balance relates to motor vehicles used by partners for both business and private purposes.

The partners use their own personal private motor cars in the partnership's business which were purchased by each partner a year ago at a cost of K300,000. Business mileage as a percentage of total mileage done by each partner together with the motor car running expenses relating to their vehicles are as given below:

<i>Partner</i>	<i>Motor car running expenses</i>	<i>Business mileage</i>
	K	%
Tiza	31,000	80
Niza	12,000	60
Wiza	<u>7,000</u>	40
Total	<u>50,000</u>	

**Note 5: General expenses**

General expenses include:

	<b>K</b>
Advertising expenses	28,400
Transportations costs for farm produce	363,600
Partner's traffic fines	2,300
Employee's Traffic fines	9,200
Depreciation	76,000
Miscellaneous allowable expenses	<u>275,100</u>
	<u>754,600</u>

### **Note 6: Implements, plant and equipment**

At 1 January 2021, the only partnership's implements, plant and machinery qualifying for capital allowances was a delivery van having an income tax value of K115,000, which was acquired at a cost of K230,000.

The following expenditure was incurred during the year:

	<b>K</b>
Dwelling houses for farm employees (each unit costing K80,000)	400,000
Tractors	278,000
Drilling of boreholes	340,000
New farm land	1,500,000
Development expenditure on a new citrus fruit plantation	250,000

During the year, old farm equipment having an income tax value of zero at 1 January 2021, which were acquired at a cost K80,000 were sold for K85,000 resulting in the profit on disposal of assets shown the statement of profit or loss shown above.

#### **Required:**

- (a) Compute the capital allowances claimable on the partnership assets for the tax year 2021. (6 marks)
- (b) Calculate the amount of the tax adjusted business profits for the partnership for the tax year 2021. (8 marks)
- (c) Prepare a computation showing the allocation of the partnership tax adjusted profit to the partners and the amount of income tax payable by each partner for the tax year 2021. (11 marks)

**[Total: 25 marks]**

**END OF PAPER**

### D3: BUSINESS TAXATION SUGGESTED SOLUTIONS

#### SOLUTION ONE

(a)	TAJIMA LIMITED		
	COMPUTATION OF TAXABLE MINING PROFIT FOR THE TAX YEAR 2021		
		K'000	K'000
	Marks		
	Net profit per accounts		93,200
	Add:		
	Mineral Royalty	9,700	
	Depreciation	3,200	
	Construction of road	3,100	
	Patent royalties (4,500 – 450)	4,050	
	Legal fees for recovery of loan	1,100	
	Legal fees –Environmental legislation	1,300	
	Exchange loss	300	
	Reconditioning of mining equipment	1,800	
	Donations to political parties	4,800	
	Gifts of diaries	<u>800</u>	
			<u>30,150</u>
			123,350
	Less:		
	Dividends received	6,900	
	Bank interest	13,600	
	Treasury bills interest	5,100	
	Capital allowances:		
	Mining equipment (118,200+1,800) x 20%	<u>24,000</u>	
			<u>(49,600)</u>
	Taxable mining profit before loss relief		73,750
	Less Tax loss (W)		<u>(36,875)</u>
	Final taxable mining profit		<u>36,875</u>

#### WORKINGS:

Loss relief:		K'000
Translated loss b/f (15,500,000 x K20.50)		<u>317,750</u>
Loss b/f indexed:		
[(1 + (21.40 – 20.50/20.50))] x K317,750		331,700
Loss relief (K73,750 x 50%)		<u>(36,875)</u>
Unrelieved tax loss at 31 December 2021		<u>294,825</u>

(b)	TAJIMA LIMITED		
	COMPUTATION OF TAXABLE MINING PROFIT FOR THE TAX YEAR 2021		
		K'000	
	Taxable mining profit	36,875	
	Bank interest (13,600 x 100/85)	16,000	
	Treasury bills interest (5,100 x 100/85)	<u>6,000</u>	
	Taxable business profit	<u>58,875</u>	
	Company income tax on mining profit (36,875 x 30%)	11,063	

Company income tax (22,000 x 35%)	<u>7,700</u>
	18,763
Less:	
WHT- Bank interest (16,000 x 15%)	(2,400)
- Treasury bills (6,000 x 15%)	<u>(900)</u>
Company income tax payable	<u>15,463</u>

- (c) The following are some of the mining incentives:
- (i) Reduced standard rate of Company Income Tax of 30%.
  - (ii) Deduction of capital expenditure incurred for the purposes of mining as well as capital expenditure on the provision of services in a mine township on a straight line basis.
  - (iii) Dividends paid are subjected to withholding tax at the rate of 0%.
  - (iv) Guaranteed input tax claim for seven (7) years on pre-production expenditure for exploration companies in the mining sector.
  - (v) Tax losses are carried forward for a period of ten (10) years.
  - (vi) Dividends paid by a company holding a large – scale mining license and carrying on the mining of base metals is taxed at 0%.
  - (vii) 20% capital allowances on Mining equipment and related expenditure when assets are brought into use.

## SOLUTION TWO

### (a) ANTELOPE LTD'S VAT POSITION

	K'000	K'000
<u>Output Tax</u>		
Sales Revenue:		43,776
(K342m x 80%) x 16%		
Intragroup sales		180
(K1.125m x 16%)		
Management fees:		
(K30m + K26.25m) x 16%		<u>9,000</u>
Total output VAT		<u>52,956</u>
<u>Input VAT</u>		
Purchases and expenses		
(K183.75m x 16%)	29,400	
Overheads		
(K67.5m x 16%) x 80%	8,640	
Commercial Plot of land (K2m x 16%)	<u>320</u>	
Total recoverable input VAT		<u>(38,360)</u>
VAT payable		<u>14,596</u>

### GAZELLE LTD'S VAT POSITION

	K'000	K'000
<u>Output Tax</u>		
Sales Revenue (K315m x 0%)		Nil
Commercial Plot of land (K2m x 16%)		<u>320</u>
Total Output Tax		320
<u>Input VAT</u>		
Purchases and expenses		
(K133.5m x 16%)	21,360	
Intra-group purchases		
(K1.125m x 16%)	180	
Management fees		
(K30m x 16%)	<u>4,800</u>	
Total recoverable input VAT		<u>(26,340)</u>
VAT repayable		<u>(26,020)</u>

### IMPALA LTD'S POSITION

This company makes only exempt supplies. It cannot therefore register for VAT and as a result, it cannot charge VAT or recover any input VAT.

### KUDU LTD'S POSITION

This company is not resident in Zambia. It cannot therefore register for VAT in Zambia. It has neither VAT payable nor repayable in Zambia.



## NET VAT POSITION OF THE GROUP COMPANIES

	K'000
VAT payable by Antelope Ltd	14,596
VAT repayable to Gazelle Ltd	<u>(26,020)</u>
Net VAT repayable	<u>(11,424)</u>

- (b) The supplies of services made by Kudu Ltd to Antelope Ltd, Gazelle Ltd and Impala Ltd, will result in each of the three Zambian resident companies being subjected to reverse Value Added Tax (VAT).

Reverse VAT will arise because Kudu Ltd does not have a tax paying agent in Zambia. If Kudu Ltd had a tax paying agent in Zambia, reverse VAT would not arise on the value of services that the three Zambian companies import from Kudu Ltd.

Each of the three companies will have to calculate reverse VAT as output VAT. The amount of reverse VAT for each company will be as follows in the year ended 31 December 2021:

$$\begin{aligned}\text{Reverse VAT} &= 30\% \times \text{K}242,250,000 \times 16\% \times 1/3 \\ &= \underline{\underline{\text{K}3,876,000}}\end{aligned}$$

The amount of reverse VAT cannot be recovered as input VAT.

- (c) Because Antelope Ltd and Gazelle Ltd are members of a group and both companies are resident in Zambia, the transfer of property by Gazelle Ltd to Antelope Ltd may be determined to have no realised value. This is because the transfer was made as part of the internal re-organisation of the group. Therefore, Gazelle Ltd will not be required to pay Property Transfer Tax.
- (d) The transfer of the shareholding in Gazelle Ltd by Antelope Ltd to Kudu Ltd will not result in any changes in the income tax positions of the companies. Each company that will be earning income from Zambian sources as well as from deemed Zambian sources will continue to be chargeable to company income tax in Zambia.

The transfer of the shareholding by Antelope Ltd to Kudu Ltd will not result in any charge for Value Added Tax as this is a sale of a business and as such it is outside the scope of VAT.

The transfer of the shareholding by Antelope Ltd to Kudu Ltd will have a realized value of K72 million for the purposes of Property Transfer Tax. However, if the transfer of the shareholding is made as part of the internal re-organisation of the group, there will be no property transfer tax payable because Antelope Ltd and Kudu Ltd are members of a group.

## **SOLUTION THREE**

### **(a) (i) Operating leasing**

- An Operating lease is a lease where the lessor retains most of the risks and rewards of ownership.
- It involves a lessor renting the leased asset for a relatively short period of time, which is significantly shorter than leased asset's economic useful life.
- The lessor usually retains the responsibility for servicing and maintaining the leased equipment

#### **Taxation implications**

The taxation implications for Aspire Plc will be as follows:

- (1) Aspire Plc will not be able to claim capital allowances on the assets as the lessor will continue to claim these.
- (2) Aspire Plc will be able to claim lease rentals as allowable deductions when computing taxable profits.
- (3) Input VAT on lease rentals will also be recoverable provided the VAT is the type which is recoverable and the business is registered for VAT.

### **(ii) Finance leasing**

- A finance lease is a lease that substantially transfers all the risks and rewards of ownership of an asset to the lessee.
- It is an agreement between the lessee and the lessor which involves the lessee being given the right to use an asset's for major part of its economic useful life.
- The lessee pays the lessor lease rentals for the grant of the rights to use the leased asset.

#### **Taxation implications**

The taxation implications for Aspire Plc will be as follows:

- (1) The interest element of the lease rentals will be tax deductible, in the computation of taxable business profits.
- (2) The capital element of the lease rentals will not be allowable when computing taxable profits.
- (3) Aspire Plc will be able to claim input VAT on the cost of the asset provided the VAT is the type which is recoverable.
- (4) Aspire Plc will claim capital allowances on the cost of the asset (excluding interest), which will be allowable deductions when computing the taxable business profits.

### **(iii) Sale and lease back**

- A sale and leaseback transaction will involve Aspire Plc selling an asset, normally land or buildings, to a financial institution like a bank and leasing back the same asset sold. It is one way of raising finance whilst retaining the use of the related assets.

- The lease payment and sale price are normally interdependent because they are negotiated as part of the same package.

### **Taxation implications**

- For tax purposes VAT will be chargeable on the sale of the asset provided the asset is taxable for VAT purposes.
- Property transfer tax will additionally arise if the asset sold is chargeable property for property transfer tax purposes.
- A balancing charge or allowance will arise on the disposal of the asset by the seller which will be computed in the normal way.
- If the asset is subsequently leased back to Aspire Plc under a short lease (i.e. a lease that does not exceed a period of 50 years) then the lease rentals will be allowable in computing the taxable business profits.
- Input VAT on the lease rentals will also be recoverable where the asset is leased back under a short lease.
- If the asset is leased back to Aspire Plc under a lease that covers a period of more than 50 years, then tax treatment will follow the substance of the transaction and Aspire Plc will continue claiming any available capital allowances on the asset.

#### **(iv) Convertible debt**

- This is debt that gives the investor the right (but not an obligation) to convert their bonds at a specified future date into other securities, normally ordinary shares, at a pre-determined price and a conversion rate that is also specified when the bonds are issued.
- Convertible bonds are normally fixed rate bonds and carry coupon rate of interest that is lower than on similar conventional bonds.
- The lower coupon rate allows for a low stress on liquidity and are seen as a way of issuing deferred equity.
- Before conversion, the security will represent debt finance and thus increase gearing level of Aspire Plc and on conversion will reduce the level of gearing for the company.
- As the convertible stock carries the right of conversion into the underlying ordinary shares, its price will be directly linked to that of the equity for as long as the conversion option exists.

### **Taxation implications**

- While convertibles remain debt, the interest is tax deductible, provided the proceeds raised are not used by Aspire Plc for capital purposes.
- Once conversion takes place the debt becomes equity, and the dividends which will be payable after conversion will not be allowable for taxation purposes.
- Costs incurred on making dividend distributions after conversion will not be allowable.

## SOLUTION FOUR

### (a) COMPUTATION OF CAPITAL ALLOWANCES

	K
<u>Delivery Truck</u>	
Wear & tear allowance (K230,000 x 25%)	57,500
<u>Dwelling houses for farm employees</u>	
Farm improvement allowance (K20,000 x 5)	100,000
<u>Tractors</u>	
Wear & tear allowance (K278,000 x 100%)	278,000
<u>Drilling of boreholes</u>	
Farm work allowance (K340,000 x 100%)	340,000
<u>Development expenditure</u>	
Wear & tear allowance (K250,000 x 10%)	25,000
<u>Farming equipment</u>	
ITV b/f	Nil
Proceeds (restricted to cost)	<u>80,000</u>
Balancing charge	<u>(80,000)</u>
	<u>720,500</u>

### (b) COMPUTATION OF TAXABLE PROFITS

	K	K
Net profit as per accounts		317,000
Add:		
Entertaining partners	43,200	
Gifts to customers	16,000	
Partner's subscriptions	9,000	
Legal fees for transfer of title to land	15,000	
Partner's salaries	780,000	
Loans to employees written off	20,300	
Motor car expenses		
- Tiza's car (K31,000 x 20%)	6,200	
- Niza's car (K12,000 x 40%)	4,800	
- Wiza's car (K7,000 x 60%)	4,200	
Partner's traffic fines	2,300	
Depreciation	<u>76,000</u>	
		<u>977,000</u>
		1,294,00
		0

Less:		
Employee loans recovered	7,500	
Profit on sale of farm equipment	16,000	
Capital allowances	<u>720,500</u>	
		<u>(744,000)</u>
		<u>550,000</u>

(c) ALLOCATION OF PARTNERSHIP PROFITS AND COMPUTATION OF FINAL TAX PAYABLE BY EACH PARTNER

1.01.2021-31.12.2021	Total K	Tiza K	Niza K	Wiza K
Partnership salaries	780,000	280,000	260,000	240,000
Balance: (5:2:1)	<u>(230,000)</u>	<u>(143,750)</u>	<u>(57,500)</u>	<u>(28,750)</u>
	550,000	136,250	202,500	211,250
Less capital allowances on				
Tiza's car (K300,000 x 20%) x 80%	(48,000)	(48,000)		
Niza's car (K300,000 x 20%) x 60%	(36,000)		(36,000)	
Wiza's car (K300,000 x 20%) x 40%	<u>(24,000)</u>			<u>(24,000)</u>
	<u>442,000</u>	<u>88,250</u>	<u>166,500</u>	<u>187,250</u>
<u>Income Tax</u>				
On first K48,000 x 0%		0	0	0
On excess				
K40,250 x 10%		4,025		
K118,500 x 10%			11,850	
K139,250 x 10%				13,925
		<u>4,025</u>	<u>11,850</u>	<u>13,925</u>

**END OF SOLUTIONS**



TAXATION PROGRAMME EXAMINATIONS

---

DIPLOMA LEVEL

---

D4: PERSONAL TAXATION

---

TUESDAY 14 DECEMBER 2021

---

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

---

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading. 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 question paper consists of **FOUR (4)** questions of twenty five (25) marks each. You MUST attempt all the **FOUR (4)** questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must NOT appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. A Taxation table is provided on pages 2 and 3

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

## Taxation Table for paper D4– Personal Taxation (2021 Examinations)

### Income Tax

#### Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800	balance	37.5%

#### Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000	balance	10%

### Capital Allowances

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

Wear and Tear Allowance –	Plant used normally	25%
	Used in Manufacturing and Leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

#### Non- commercial vehicles

Wear and Tear Allowance		20%
-------------------------	--	-----

#### Industrial Buildings:

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

#### Low Cost Housing (Cost up to K20,000)

Wear and Tear Allowance		10%
Initial Allowance		10%

#### Commercial Buildings

Wear and Tear Allowance		2%
-------------------------	--	----

#### Farming Allowances

Development Allowance		10%
Farm Works Allowance		100%
Farm Improvement Allowance		100%

## Presumptive Taxes

<b>Turnover Tax</b>	4%
<b>Presumptive Tax for Transporters</b>	

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

## Property Transfer Tax

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



## **Attempt all FOUR (4) Questions**

### **QUESTION ONE**

**For the purposes of this question you should assume that today's date is 1 December 2020 and that the earnings ceiling for the purposes of NAPSA contributions is K278,256.**

KSC Technologies Limited is a Zambian resident company engaged in software development. The company intends to develop an accounting software but it does not have a specialist to help them develop the software. The process of developing the software will take sixteen (16) months to complete. The company, therefore, wishes to hire the services of Kambole, a specialist in software development, either as an employee or as self-employed.

In each case the engagement will commence on 1 January 2021 and will end on 30 April 2022.

If Kambole is engaged as an employee the following will apply:

- (1) He will be entitled to a salary of K56,400 per month.
- (2) The company will buy a specialized computer at a cost of K80,000 to be used by Kambole in the development of the software.
- (3) Kambole will be required to consult the expected users of the software on the features they would like the software to have. As a result Kambole will be travelling out of town on a regular basis. He will use his own motor car which he will acquire on 1 January 2021 at a cost of K140,000. It is estimated that out of the total mileage for the tax year 2021, 70% will be for business. The total motor car running expenses are expected to be K8,700 per month.
- (4) The company will pay him K9,400 per month as car commuted allowance.
- (5) The company will employ three (3) other staff to assist Kambole in the performance of his duties. Each of these staff will be paid a monthly salary of K15,600.
- (6) Kambole will contribute 5% of his basic salary as employee's NAPSA contributions. KSC Technologies Limited will also contribute 5% of Kambole's basic salary as employer's NAPSA contributions.

If Kambole is engaged as self-employed the following will apply:

- (1) Kambole will charge KSC Technologies Limited an all-inclusive price of K172,100 per month.
- (2) Kambole will use his own motor car for travelling, which he will acquire on 1 January 2021 at a cost of K140,000. It is estimated that out of the total mileage for the tax year 2021, 70% will be for business use. The total motor car expenses are expected to be K8,700 per month.
- (3) He will acquire a specialized computer at a cost of K80,000 to be used in the development of the software.
- (4) He will employ three (3) assistants at a monthly salary of K15,600 per month each. Each employee will be required to contribute 5% of their basic salary as employees' NAPSA

contributions. Kambole will also be required to contribute 5% of each employee's basic salary as employer's NAPSA contributions.

(5) Other operating expenses will average K16,300 per month.

Kambole has come to you for advice as which of the two (2) alternative will be beneficial to him.

**Required:**

- (a) Calculate the amount of income tax payable for the tax year 2021 by Kambole if he is employed. Your answer should include a computation of NAPSA contributions to be paid by Kambole for the tax year 2021. (7 marks)
- (b) Explain the type of tax Kambole will be required to pay for the tax year 2021 and calculate the amount of tax payable by Kambole for the tax year 2021 if he is self-employed. (10 marks)
- (c) Advise Kambole on which alternative as between being employed or being self-employed will be more beneficial. Your advice should be based on the net income after tax and other expenses under each alternative. (6 marks)
- (d) Explain how the factor of "control" can be used to establish whether one is an employee or self employed. (2 marks)

**[Total: 25 marks]**

**QUESTION TWO**

**For the purposes of this part of the question, you should assume that today's date is 20 December 2020 and that the ceiling for the purposes of NAPSA contributions is K278,256 per annum.**

Tendai is the 99% shareholder and Managing Director of Tendy Limited, a trading company making up its accounts to 31 December each year. Tendai has run this business for several years. She has forecast the company's taxable business profits for the year ended 31 December 2021 to be K1,200,000 after her annual gross salary for K250,000. Apart from this salary, Tendai currently has no other income.

Tendai is seeking advice relating to the tax applications of extracting an additional amount of K150,000 (gross) from the company before 31 December 2021. She has suggested that this could either be in the form of a cash bonus payment, a cash dividend or cash lumpsum payment in an approved pension fund, by the company on her behalf.

**Required:**

- (a) Explain the income tax and NAPSA implications if:
  - (i) the additional payment of K150,000 were to take the form of a cash bonus payment. (8 marks)
  - (ii) the additional payment was to take the form of a cash dividend payment. (6 marks)

Your answer should include appropriate calculations in each case and a conclusion as to whether this payment should take the form of cash bonus or a cash dividend payment.

(b) Explain what the taxation implications would be if the payment was to instead take the form a cash lumpsum payment made by the company on her behalf into an approved pension fund. (4 marks)

(c) Explain the possible causes and the differences between tax avoidance and tax evasion and discuss the practical consequences of practicing each of them. (7 marks)

**[Total: 25 marks]**

### **QUESTION THREE**

Joseph Maluti was born in Zambia in 1972. He is married with two (2) children and he is employed by ZADCO Limited a Zambian resident company engaged in manufacturing. His monthly salary had been K21,900. He is also entitled to housing allowance amounting to 20% of the basic salary and transport allowance amounting to 12% of the basic salary.

The company has always paid life insurance premiums on his behalf amounting to K1,230 per month. In addition to the life insurance premium, the company reimbursed Joseph the medical expenses incurred on his sick child amounting to K11,100 during the year ended 31 December 2021.

During the year ended 31 December 2021, he received royalties from Zambian companies amounting to K52,700 (net) and dividends from Zambian companies amounting to K17,850 (net). Withholding tax had been deducted at source.

Joseph has made investments in shares of foreign companies and owns properties situated in foreign countries. During the year ended 31 December 2021 he received dividends from foreign companies amounting to \$1,260 and rental income from foreign properties amounting to \$4,800. The foreign dividends and rental income are net of withholding tax deducted in foreign countries at a rate of 40% and 20% respectively. Joseph is not sure whether he will receive any tax relief against the Zambian income tax on foreign income.

The following are the payments made by Joseph Maluti during the year ended 31 December 2021:

	<b>K</b>
Income tax deducted under pay as earn	88,560
Professional subscription	3,600
Donation to political parties	5,000
Donation to approved public benefit organization	6,000
Medical expenses for his sick child	11,100

Joseph has always contributed NAPSA at 5% of his basic salary.

Joseph is considering opting for early retirement in the year 2022. He intends to invest all his retirement benefits in Zambian companies and commercial properties. However, he is not sure whether he should invest in companies listed on the LuSE or not. Joseph has come to you for advice on the amount of income tax payable for the tax year 2021 and the tax implications of the investments he is considering.

During the year ended 31 December 2021 the mid exchange rates averaged K18.25 per \$1.

**Required:**

(a) Explain the following methods of giving double taxation relief to Zambian resident individuals receiving income from foreign sources:

- (i) Treaty relief (2 marks)
- (ii) Unilateral credit relief (3 marks)
- (iii) Unilateral expense relief (1 mark)

(b) Advise Joseph of the amount of income tax payable for the tax year 2021, assuming that credit is available against Zambian income tax on foreign income. (13 marks)

(c) Advise Joseph of the tax implications of investing in and subsequent sale of the following:

- (i) Shares of companies listed on the Lusaka Securities Exchange
- (ii) Shares of companies not listed on the Lusaka Securities Exchange
- (iii) Properties to let out on a commercial basis. (6 marks)

**[Total: 25 marks]**

**QUESTION FOUR**

The Government of the Republic of Zambia introduced Advance Income Tax to capture other potential tax payers who may not be registered for income tax.

**Required:**

(a) Briefly explain Advance Income Tax and the circumstances in which Advance Income Tax is chargeable. (2 marks)

(b) Explain the requirements which must be met for a taxable person to claim a refund for Advance Income Tax suffered. (4 marks)

(c) In relation to the basis of assessment for business profits and basis periods describe the rules which must be used to determine the basis period of a business for:

- (i) The opening year or the year the trade commences. (3 marks)
- (ii) The closing year or the year a trade ceases. (4 marks)

(d) The following information relates to the activities of the following two (2) tax payers for the tax year 2021:

**Sikazwe**

Sikazwe, a Zambian resident individual purchased two (2) vehicles which he used in his public passenger transportation business generating a net profit as per accounts for the year ended 31 December 2021 of K236,000, from a total annual turnover of K732,000 from the business. The profit as per accounts figure of K236,000 was arrived at after deducting operating expenses which included drivers' salaries amounting to K72,000, motor vehicle

running expenses including fuel of K212,400, fines for various traffic offences committed by the drivers of K37,200, depreciation charges on the motor vehicles of K96,000 and other miscellaneous expenses incurred wholly and exclusively for business purposes of K78,400.

The two (2) vehicles included a four-passenger seater Toyota Corolla car, with a cylinder capacity of 1400cc which he acquired on 1 February 2021 at a cost of K180,000 and a sixteen-passenger seater Toyota Hiace bus with a cylinder capacity of 2,700cc which he acquired on 10 April 2021 at a cost of K300,000. The Toyota corolla was operational every day from 10 February 2021, except for a total of 18 days in the year when it broke down, whilst the Toyota Hiace bus was operational every day from 17 April 2021 except for a total of 23 days during the year when it broke down.

### **Simumba**

Simumba, a Zambian resident individual commenced a retail business on 1 January 2021. The business generated a profit as per accounts of K104,000 from a turnover of K306,000 which was generated evenly throughout the tax year 2021. The net profit figure was arrived at after deducting, Simumba's annual salary of K60,000, employees' salaries of K30,000, rent for business premises of K12,000, advertising expenses of K3,750, entertainment expenses for business associates of K3,250, donations to an approved public benefit organisation of K1,500, donations of K2,500 to unapproved charitable organisations and other expenses incurred wholly and exclusively for business purposes of K89,000.

### **Required:**

- (i) Explain giving reasons how each of the above tax payers will be assessed to tax and compute the total amount of tax paid by each individual in the tax year 2021. (4 marks)
- (ii) Compute the amount of income tax paid by each individual for the tax year 2021. (8 marks)

**[Total: 25 marks]**

**END OF PAPER**

## D4: PERSONAL TAXATION SUGGESTED SOLUTIONS

### SOLUTION ONE

(a) If Kambole is employed

Income tax payable for the tax year 2021

	K	K
Salary (K56,400 x 12)		676,800
Car commuted allowance (K9,400 x 12)		<u>112,800</u>
Gross emoluments		789,600
Less:		
Motor car running expenses (K8,700 x 12 x 70%)	73,080	
Capital allowances on motor car (K140,000 x 20% x 70%)	<u>19,600</u>	
		<u>(92,680)</u>
Taxable income		<u>696,920</u>

Computation

First K82,800	9,960
Balance K614,120 @37.5%	<u>230,295</u>
Income tax payable	<u>240,255</u>

NAPSA contributions:  $K278,256 \times 5\% = K13,913$ .

(b) If Kambole is self-employed

Under this alternative Kambole will be in business and therefore, he will be required to pay the normal income tax because his annual turnover will be more than K800,000.

Income tax payable for the tax year 2021

	K	K
Revenue (K172,100 x 12)		2,065,200
Less:		
Employees' salaries (K15,600 x 3 x 12)	561,600	
Employers' NAPSA contributions (K561,600 x 5%)	28,080	
Motor car running expenses (K8,700 x 12 x 70%)	73,080	
Other operating expense (K16,300 x 12)	195,600	
Capital allowances:		
Motor car (K140,000 x 20% x 70%)	19,600	
Specialized computer (K80,000 x 25%)	<u>20,000</u>	
		<u>(897,960)</u>
Taxable business profit		<u>1,167,240</u>

Computation

First K82,800	9,960
Balance K1,084,440 @37.5%	<u>406,665</u>

Income tax payable		<u>416,625</u>
--------------------	--	----------------

(c) Net income

<b>If Kambole is Employed</b>	<b>If Kambole is self-employed</b>	
K	K	
Gross income	789,600	2,065,200
Less:		
Income tax payable	(240,255)	(416,625)
Employees' NAPSA	(13,913)	
Employers' NAPSA		(28,080)
Employees' Salaries		(561,600)
Motor car expenses (K8,700 x 12)	(104,400)	(104,400)
Other expenses (K16,300 x 12)	_____	<u>(195,600)</u>
Net income	<u>431,032</u>	<u>758,895</u>

It will be more beneficial for Kambole to be engaged as a self- employed because his net income under this alternative will be more than if he is engaged as an employee.

(d) Employees are controlled by their employers who give the stipulated time when employees are supposed to report for work and are told what to do. Self-employed individuals can perform the duties at their own convenience.

## SOLUTION TWO

(a) (i) Tax implications of Profit extraction through bonus

If the additional payment were to take the form of a bonus, the following will be the income tax and NAPSA implications:

(1) The bonus will be an allowable expense when computing the company's taxable profits.

(2) As a result, an additional bonus will result in a saving in company income tax at the rate of 35%. The tax saved will amount to:

$$35\% \times K150,000 = K52,500$$

(3) Tendai will be assessed to income tax at the rate of 37.5% on the bonus as her existing income is already above K82,800 for the tax year 2021. The additional income tax that she will pay will therefore be equal to:

$$K150,000 \times 37.5\% = K56,250.$$

(4) Additional NAPSA contributions will be payable by both the company and Tendai as the existing salary of K250,000 is below the NAPSA contributions ceiling of K278,256.

(5) The additional employee's NAPSA contribution payable by Tendai will be:

$$K278,256 - K250,000 = K28,256 \times 5\% = K1,413$$

(6) The additional employer's NAPSA contribution payable by Tendy Ltd will also be:

$$(K278,256 - K250,000) \times 5\% = K1,413$$

(1 mark for each valid point up to a maximum of 6 marks)

(7) The net reduction in income as a result of the payment taking the form of a cash bonus will therefore be:

	K	K
Tax saved		
K150,000 x 35%		52,500 ½
Additional income tax on bonus		
(K150,000 x 37.5%)	56,250	½
Additional employee's NAPSA contributions.	1,413	½
Additional employer's NAPSA contributions.	<u>1,413</u>	½
		<u>59,076</u>
Net reduction in income	<u>(6,576)</u>	

(ii) If the additional payment were to take the form of a dividend, the income tax and NAPSA implications would be as follows:

(1) The dividend payment will not be an allowable expense when computing the company's taxable income. The dividend will therefore be paid out of profits which will have been subjected to company income tax.

(2) The dividend will be subjected to withholding tax at the rate of 15% and this will amount to  $15\% \times K150,000 = K22,500$ .



(3) Tendai will not be subject to any income tax on the dividend she will receive from the company as withholding tax on dividend is the final tax.

(4) NAPSA contributions will not be payable by either the company or Tendai as dividends are not earnings for the purposes of NAPSA contributions.

(5) This means the payment of K150,000 as a dividend will increase the amount of taxation payable by the amount of withholding tax of K22,500.

## **CONCLUSION**

In conclusion, the additional payment of K150,000 should take the form of an additional cash bonus payment as this will then be cheaper for the company and Tendai by:

$$K22,500 - K6,576 = K15,924$$

(b) If the additional payment was to take the form of a contribution into an approved pension fund, the taxation implications would be as follows:

(1) The amount would be an allowable deduction when computing the company's taxable profit as it would be a payment into an approved pension fund.

(2) The payment will result in a saving in the company income tax by K52,500 being 35% of K150,000.

(3) The amount paid as a contribution into the approved fund by the company will not be treated as a taxable benefit in kind for Tendai.

(4) Upon retirement, Tendai would be able to receive a tax-free lump sum payment from the approved pension fund.

(c) Tax evasion refers to the use of illegal means to avoid tax. Such means include failing to disclose the relevant amounts of income and other forms of fraud which the tax payers may engage in. The aim of the tax payer practicing tax evasion is to defraud the government of the revenue.

Tax evasion arises when taxes are perceived to be too high or unfair on the tax payers.

Another cause of tax evasion may be intentional where the tax payer intentionally hides some income.

Tax evasion is an offence and may be punishable by fines and/or imprisonment.

On the other hand, tax avoidance is concerned with identifying any loop holes in the tax legislation, and using them to minimize or defer tax liabilities. Tax avoidance is, however difficult to define more thoroughly.

Tax avoidance is caused by tax payers planning their tax affairs so as to minimise or defer taxation liabilities.

Tax avoidance is not an offence, though, to discourage its practice, the government may issue anti-avoidance legislation. Anti-avoidance legislation aims at sealing the loop holes in the taxes legislation so as to prevent taxpayers from taking advantage of them, and thereby reducing their tax liabilities lawfully.

Paying taxes is a moral obligation for all taxable persons. Actions taken to reduce taxes payable because the taxable person intentionally wants to pay less or because the taxes legislation is inadequate could be considered as unethical practices.

### SOLUTION THREE

(a) The following are the methods of giving double taxation relief

(1) Treaty relief

This is the relief that is available when two or more states enter into an agreement on how income earned in one state should be treated for tax purposes if remitted in the other state and vice versa.

The double taxation relief under this method is given according to the treaty. In some cases, the treaty may provide that income is subjected to income tax only in one country or the tax charged apportioned between the two countries in question.

(2) Unilateral credit relief

This method applies where there is no treaty relief. Under this method, double taxation is given unilaterally in the Republic of Zambia. The amount of foreign tax suffered is credited against Zambian income tax on the foreign income, limited to a maximum of the Zambian tax on that foreign income.

The amount of tax available for credit is the lower of:

- (i) The actual amount of foreign tax paid to a foreign tax authorities;
- (ii) The Zambian tax chargeable on the foreign income calculated using the formula:

Gross foreign income x Zambian tax charge  
Total Assessable income

(3) Unilateral expense relief

Under this relief, the foreign tax paid is deducted from the foreign income as if it were an expense, before including it in the Zambian tax computation.

(b) Joseph

Income tax payable for the tax year 2021

	K	K
Salary (K21,900 x 12)		262,800
Housing allowance (K262,800 x 20%)		52,560
Transport allowance (K262,800 x 12%)		31,536
Life insurance premiums (K1,230 x 12)		<u>14,760</u>
		361,656
Zambian investment income		
Royalties (K52,700 x 100/85)		<u>62,000</u>
		423,656
Foreign income		
Dividends (\$1,260 x K18.25 x 100/60)		<u>38,325</u>
		461,981
Less:		
Professional subscription	3,600	
Donation to approved public benefit Organization	<u>6,000</u>	
		<u>(9,600)</u>

Taxable income	<u>452,381</u>
Computation	
First K82,800	9,960
Balance K369,581 @37.5%	<u>138,593</u>
Income tax liability	148,553
Less:	
PAYE	(88,560)
WHT- Royalties (K62,000 x 15%)	(9,300)
Double taxation relief (w)	<u>(11,778)</u>
Income tax payable	<u>38,915</u>

#### Working

Double taxation relief	
Total assessable income	K
Taxable income	452,381
Zambian dividends (K17,850 x 100/85)	<u>21,000</u>
	<u>473,381</u>

Zambian tax charge	
Income tax liability	148,553
WHT on Zambian dividends (K21,000 x 15%)	<u>3,150</u>
	<u>145,403</u>

Foreign tax paid:  $K38,325 \times 40\% = K15,330$

Zambian tax:

Gross foreign income x Zambian tax charge

Total assessable income

K38,325 x K145,476

K473,381

= K11,778

The double taxation relief is K11,778 which is the lower of the foreign tax paid.

#### (c) Tax implications

##### (i) Shares of companies listed on the LuSE

- (1) Dividends received are subjected to withholding tax at a rate of 0% which is the final tax.
- (2) There is no property transfer tax charged on the transfer of shares listed on the LuSE.

##### (ii) Shares of companies not listed on the LuSE

- (1) Dividends received are subjected to withholding tax at a rate of 15% which is the final tax.
- (2) Property transfer tax is charged on the transfer of the shares at a rate of 5% of the realized value.

##### (iii) Commercial properties

- (1) Rental income received is subjected to withholding tax at a rate of 10% which is the final tax.
- (2) Property transfer tax is charged on the transfer of these properties.

## **SOLUTION FOUR**

(a) Advance income Tax (AIT) is chargeable and withheld when goods are imported for commercial purposes.

This tax is targeted at capturing unregistered business importers who make commercial imports thereby broadening the tax base and to enhance tax compliance for registered taxpayers.

(b) A refund may be due to the importer who has paid Advance Income Tax and fulfils the following conditions;

- (1) The importer must be registered for Income Tax or Turnover Tax;
- (2) The importer must submit an Income Tax Return or a Turnover Tax Remittance Card at the end of the respective charge year;
- (3) The importer must provide proof of payment such as receipts and any other relevant documents;
- (4) The importer must make a claim that will be subjected to the refund processes as outlined in the Income Tax Act.

(c) (i) The commencement rules are as follows:

- (1) If the first accounting period is made up of exactly 12 months or less, then the normal rules (that is, the CYB or the PYB) apply depending on when the period ends.
- (2) If the first accounting period is made up of more than 12 months then:
  - that period is split into 2 notional accounting periods for tax purposes with the first period consisting of less than 12 months and the second period consisting of exactly 12 months ending on the first accounting date.
  - The profit for the whole period is then allocated to the two notional accounting periods on a time basis after which the normal rules are applied to determine the tax year in which the profits of the second accounting period should be assessed, with the profits of the first period being assessed in the preceding tax year.

(ii) Cessation Rules

- (1) If the last accounting period is exactly 12 months long, then the normal rules will apply i.e. the CYB or PYB as applicable.
- (2) If the last accounting period is less than 12 months, then the profits of that accounting period are assessed in the tax year following the one in which the profits of the second last accounting period were assessed.

- (3) If the last accounting period is made up of more than 12 months, then:
- that period is split into two periods with the first period consisting of 12 months ending on the normal accounting date and the second period consisting of a short accounting period ending on the date of cessation.
  - profits of the long accounting period are then allocated to the two resulting periods on a time basis.

**(d) (i) Sikazwe**

Sikazwe will be required to pay tax under the turnover tax system. This is because he is carrying on a business whose annual turnover is less than K800,000.

Turnover tax applies to any person carrying on a business with an annual turnover of K800,000 or less and any person whose income consists of amounts, which are subjected to withholding tax, where withholding tax is not the final tax.

Sikazwe was therefore required to pay turnover tax at the rate of 4% of its monthly turnover within 14 days after the end of each month throughout the tax year 2021.

**Sikazwe**

Sikazwe is an individual carrying on businesses for the transportation of public passengers for reward and therefore will be required to pay presumptive taxes for transporters and will not be required pay income tax on the profits he will generate in the tax year 2021.

The amount of presumptive taxes payable will be fixed estimated amounts based on the seating capacity of the motor vehicles he will use in the transportation business.

**(ii) Sikazwe**

Turnover tax at the rate of 4% of the gross monthly turnover without deducting any business expenses.

Since the turnover was earned evenly throughout the year, the amount of monthly turnover is:

$$1/12 \times K732,000 = K61,000.$$

The monthly turnover tax will be computed as follows:

$$K61,000 \times 4\% = K2,440$$

The total amount of turnover tax that will be paid in the tax year 2020 is:

$$K2,440 \times 12 = K29,280$$

**Presumptive tax**

The amount of presumptive taxes paid by Sikazwe will be computed as follows:

**Toyota Corolla**

$$365 \text{ days} - 31 - 9 \text{ days} - 18 \text{ days} = 307 \times 2.40 = K736.80$$

**Toyota Hiace**

$365 - 31 - 28 - 31 - 16 - 23 = 236 \text{ days} \times 4.95 = \text{K}1,168.20$

**Simumba**

Simumba runs a retail business and as his turnover is less than K800,000, he will be required to pay turnover tax @ 4%. Therefore, the monthly turnover tax is K1,020 ( $\text{K}306,000/12 \times 4\%$ ) and the annual turnover tax will be K12,240 ( $\text{K}1,020 \times 12$ )

**END OF SOLUTIONS**



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

---

D5: INTERNATIONAL TAXATION

---

THURSDAY 16 DECEMBER 2021

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 question paper consists of **FOUR (4)** questions of Twenty Five (25) marks each. You must attempt all the **FOUR (4)** questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. A Taxation table is provided on pages 2, 3 and 4.

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



## Taxation table for paper D5– International Taxation 2021 Examinations

### Income Tax

#### Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

#### Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

#### Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%
On income from manufacture of products made out of copper cathodes	15%

### Mineral Royalty

#### Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US\$4,500	5.5% of norm value
From US\$4,500 to less than US\$6,000	6.5% of norm value
From US\$6,000 to less than US\$7,500	7.5% of norm value
From US\$7,500 to less than US\$9,000	8.5% of norm value
From US\$9,000 and above	10% of norm value

#### Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

### Capital Allowances

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

Wear and Tear Allowance –	Plant used normally	25%
	Used in Manufacturing and Leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

**Non- commercial vehicles**

Wear and Tear Allowance		20%
-------------------------	--	-----

**Industrial Buildings:**

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

**Low Cost Housing (Cost up to K20,000)**

Wear and Tear Allowance		10%
Initial Allowance		10%

**Commercial Buildings**

Wear and Tear Allowance		2%
-------------------------	--	----

**Farming Allowances**

Development Allowance		10%
Farm Works Allowance		100%
Farm Improvement Allowance		100%

**Presumptive Taxes**

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

**Presumptive Tax for Transporters**

**Seating capacity**

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

**Property Transfer Tax**

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

**Value Added Tax**

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

**Customs and Excise duties on used motor vehicles**

<b>Motor vehicles for the transport of ten or more persons, including the driver</b>	<b>Aged 2 years but below 5 years</b>		<b>Aged 5 years and over</b>	
	<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

<b>Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars</b>	<b>Aged 2 years but below 5 years</b>		<b>Aged 5 years and over</b>	
	<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>
<b>Sedans</b>				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642

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

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

**SUVs**

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

**Aged 2 years but below 5 years**      **Aged 5 years and over**

**Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):**

Customs duty	Excise duty	Customs duty	Excise duty
K	K	K	K

**Single cab**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, <b>with spark ignition internal combustion piston engine</b>	30,697	13,302	24,119	10,452

**Panel Vans**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601

**Trucks**

GVW up to 2 tonnes	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,461	0
GVW exceeding 20 tonnes, <b>with spark ignition internal combustion piston engine</b>	37,086	28,432	13,907	10,662

**Surtax**

**On all motor vehicles aged more than five (5) years from year of manufacture**

K2,000

**Customs and Excise on New Motor vehicles**

**Duty rates on:**

- Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons,**

<b>including the driver:</b>	
<b>Customs Duty:</b>	
Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000
<b>Excise Duty:</b>	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%
<b>2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:</b>	
<b>Customs Duty</b>	
Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000
<b>Excise Duty:</b>	
Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
<b>3. Buses/coaches for the transport of more than ten persons</b>	
<b>Customs Duty:</b>	
Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000
<b>Excise Duty:</b>	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%
<b>4. Trucks/lorries with gross weight exceeding 20 tonnes</b>	
<b>Customs Duty:</b>	
Percentage of Value for Duty Purposes	15%
<b>Excise Duty:</b>	
Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

## Attempt All FOUR (4) Questions

### QUESTION ONE

(a) In order to relieve the burden of paying double taxes by tax payers, the Government of the Republic of Zambia has signed Double taxation treaties with various countries.

#### **Required:**

- (i) Explain the main purpose/roles of Double taxation treaties (6 marks)
- (ii) Explain the term “thin capitalisation”. (4 marks)
- (iii) Define four (4) factors for the identification of tax havens as per OECD. (8 marks)

(b) Pretty Zumba is a resident in Zambia although domiciled by choice in a country called Kitwi. She is one of the Directors of PQN Plc, a Zambian resident company. She joined PQN Plc on 1 March 2021.

Pretty Zumba received the following income from her investments during the tax year 2021.

- (i) Rental income of K30,500 from her house in Kitwi. The amount is net of 20% Kitwi withholding tax.
- (ii) Dividends of K60,000 (gross) from shares in a company resident in Kitwi, withholding Tax at the rate of 15% was deducted in Kitwi.

Pretty Zumba was paid an all-inclusive monthly salary of K120,000. The PAYE deducted by PQN Plc was K198,875.

Zambia is currently negotiating a Double Taxation Treaty with Kitwi. you should assume that credit against Zambian income tax is available in respect of foreign attributable income tax from Kitwi.

#### **Required:**

Compute Pretty Zumba’s **income tax payable** for the tax year 2021. (7 marks)

**[Total: 25 marks]**

## **QUESTION TWO**

(a) Various governments have to deal with and minimize the effects of money laundering and tax avoidance and as such several countries have developed models for enhanced co-operation between revenue authorities in order to work to their mutual benefit.

In order to combat Tax evasion and Money laundering, the Financial Task Force on Money laundering (FATF) was created to come up with measures to combat these vices by national governments.

### **Required:**

- (i) Explain the main co-operation models adopted by revenue authorities. (8 marks)
- (ii) Explain any five (5) measures national governments could implement to combat tax evasion and money laundering. (10 marks)
- (b) Explain how a foreign direct investor may acquire voting power of an enterprise in an economy. (4 marks)
- (c) Explain two (2) main areas of interaction between human rights law and Tax law. (3 marks)

**[Total 25 marks]**

## **QUESTION THREE**

(a) Double Taxation Conventions are agreements between countries which are intended to eliminate the double taxation of income or gains arising in one country and paid to those who are resident in another country. The basis of these International tax arrangements are the concepts of source and residence respectively. These concepts make a distinction between resident and non- residents.

### **Required:**

- (i) Under the concept of source, explain the basis of imposing tax which is used (2 marks)
- (ii) And under the concept of residence, explain the basis of imposing tax that is used. (2 marks)
- (iii) A company is created so that it can generate profits for distribution to the shareholders. Most multi- national companies seek businesses beyond their borders of their original countries for various reasons. One of the reasons for investments by conglomerates is to seek lower taxes and cheaper labour.

### **Required:**

Explain three (3) benefits of Globalization on a nation. (6 marks)

(b) George Katongo is a United Kingdom qualified Nuclear Scientist who was born in

Zambia but migrated to the United Kingdom in 2010 to study at a University in West Bromwich. Upon the completion of his studies in 2015 he applied for a British citizenship and in so doing, he renounced his Zambian citizenship and took up employment with a Nuclear Research Centre in Southampton. On the 1 of January 2019, he came back to Zambia and reclaimed his Zambian citizenship by resumption.

George Katongo was employed by Nuclear One Ltd in Zambia as a Senior Research Manager on 1 March 2021. The conditions of employment were as follows:

- (1) He was paid a monthly salary of K105,000 and contributed the appropriate amounts to NAPSA.
- (2) George Katongo was permanent and pensionable and was entitled to a gratuity of five times his final annual salary on retirement.
- (3) He was accommodated in a house which the company arranged for him. The housing allowance paid by the Nuclear One Ltd to George for 2021 was K125,000.
- (4) He paid his own Nuclear Profession subscription for the year 2021 amounting to K25,000.

George Katongo also had the following incomes from other sources during the charge year 2021:

- Salary K160,000, from part – time employment as a lecturer at Nuclear Research Institute
- PAYE K480,000 paid
- Dividends from a company resident in Southampton – K9,000 net (WHT 10%)
- Bank interest from a Zambian bank – K75,000 (gross)
- Rent from his house in Southampton – K69,000 net (WHT rate is 25%)
- Rent from his house in Zambia – K62,400 gross (WHT rate is 10%)

**Required:**

- (i) Explain whether George Katongo would be regarded as being a Zambian resident in the tax year 2021. (4 marks)
- (ii) Calculate the final income tax paid by George Katongo in the tax year 2021. Assume double taxation relief, where applicable is granted unilaterally in Zambia by full credit of any foreign direct taxes against Zambian income tax. (11 marks)

**[Total: 25 marks]**



#### **QUESTION FOUR**

A Foreign Direct Investment is an investment in a business by an investor from another country in which the foreign investor has control over the company purchased. And for this purpose the OECD defines control as owning 10% or more of the business.

The possible types of FDI's includes Horizontal FDI platform FDI, Vertical FDI.

#### **Required:**

State the following:

- (a) Meaning of a foreign direct investor (2 marks)
- (b) A vertical FDI (2 marks)
- (c) Two (2) methods of FDI (2 marks)
- (d) Any five (5) possible incentives for FDI (5 marks)
- (e) Three (3) possible advantages and three disadvantages to the company investing in a foreign country (6 marks)
- (f) Four (4) possible advantages and three (3) possible disadvantages of FDI to the foreign company (7 marks)
- (g) One reason why MNE's make FDI (1 mark)

**[Total: 25 marks]**

**END OF PAPER**

## D5: INTERNATIONAL TAXATION SUGGESTED SOLUTIONS

### SOLUTION ONE

(a)

(i) The main purpose/roles of Double Taxation Treaties

- Protect against the risk of double taxation where the same income is taxed in two states
- Provide certainty of treatment for cross border trade and investment
- Prevent excessive foreign taxation and other forms of discrimination against business interests abroad
- Protect the government's rights and protect against attempts to avoid or evade tax
- They also contain provisions for the exchange of information between national taxation authorities
- Seek to encourage and maintain an international consensus on cross border economic activity and to promote international trade and investment

(ii) Thin capitalisation

Thin capitalisation is the practice of excessively funding a branch or subsidiary with interest bearing loans from related parties rather than with share capital. The fact that interest is usually deductible for the borrower and taxed to the non-resident lender at low rate of withholding tax (or not at all in some cases) while in most cases company profits funding dividends are fully taxed makes the practice attractive tax wise to a non-resident investor. Although it is possible to deal with these problems under the arm's length principle, taxpayers and tax administrators often want more guidance on the level of permissible loan funding for a subsidiary than to be told that related party loans can be made up to the point and on the terms that an independent third-party lender would allow, having regard to the other liabilities of the subsidiary. Thin capitalisation rules seek to deal with this problem by denying deductions for interest in defined cases.

(iii) Factors for the identification of Tax havens as per OECD

- **No or only nominal taxes**

It means that there is no or nominal tax on the relevant income usually capital. this is the first necessary condition to identify a tax haven but it is not sufficient because a country may be competing fairly or adopting a preferential regime

- **Lack of exchange of information**

Tax havens typically have in place laws or administrative practices under which businesses and individuals can benefit from strict secrecy rules and protections against scrutiny by tax authorities thereby preventing the effective exchange of information on taxpayers benefitting from the low tax jurisdiction.

- **Lack of transparency**

for example, the details of the regime and or application and or its application are not apparent, or there is inadequate regulatory supervision or financial disclosure. lack of transparency may be attractive for those who want to hide the origins of their income or keep then undeclared in their source countries

- **No substantial activities**

The jurisdiction facilitates the establishment of foreign owned entities without the need for a local substantive presence. this what makes doubtful how small islands can host billions of

dollars in foreign direct investment if they apparently do not have the necessary resources to yield production

(b) Computation of Income Tax payable

Pretty Zumba

Personal income tax computation for the charge year 2021

	K
Salary (K120,000x10 months)	1,200,000
Foreign dividends	60,000
Taxable income	1,260,000
Income Tax	
First K48,000 x 0%	0
Next K9,600x 25%	2,400
Next K25,200 x 30%	7,560
Balance K1,177,200 x 37.5%	441,450
	451,410
Less double taxation relief (w1)	(9,000)
	442,410
Less PAYE	198,875
Final income tax payable	<b>243,535</b>

Workings

Double Taxation Relief (DTR)

Lower of:

- (i) Foreign tax paid on dividend =  $K60,000 \times 15\% = K9,000$
- (ii) Zambian tax charge on foreign income

Gross dividend

Total assessable income

60,000 x 451,410

1,260,000

=K21,496

Therefore, the DTR is K9,000 which is the lower amount

## **SOLUTION TWO**

(a)

(i) The main co-operation models

- Joint investigation teams

These enable agencies with a common interest to work together in an investigation. In addition to sharing information, this enables an investigation team to draw on a wider range of skills and experience from investigators with different backgrounds and training. Joint investigations may avoid duplication arising from parallel investigations, and increase efficiency by enabling officials from each agency to focus on different aspects of an investigation depending upon their experience and legal powers.

- Inter-agency intelligence centers

These are typically established to centralize processes for information gathering and analysis for a number of agencies they focus on specific geographical area or type of criminal activity or have a wider role in information sharing

- Secondments and co-location of Personnel

These are an effective way of enabling skills to be transferred while allowing personnel to build contacts with their counterparts in another agency

- The use of shared data bases

Dissemination of strategic intelligence products such as newsletters and intelligence briefs, joint committees to coordinate policy in areas of shared responsibility and inter agency meetings and training sessions to share information on trends in financial crime, guidance on investigative techniques and best practice in managing cases

(iii) Measures to combat tax invasion and money laundering which national governments should implement

- **Demand full transparency from financial institutions**

To provide all information concerning their activities in offshore supervisory authorities. In this regard financial institutions must be discouraged or, if necessary prohibited from operating in territories that feature on the black list of FATF, OECD and the World Bank's SAR (Stolen money asset recovery initiative)

- **Establish an interconnected and well integrated system of legal shareholder registries**

Encompassing economic blocks and their member states, which will feature all necessary information concerning the shareholders of corporations operating within economic blocks. This registry may be complemented with a risk based index that will factor in some of the most suspicious aspects of a corporation's operations. This information on this registry should be available to authorities on demand and all corporations should be expected to provide information concerning their beneficial owner

- **Create a regularly updated beneficial registry**

Information of this kind should either be exchanged or coordinated across member states without any obstacle, so that instances of fiscal dumping would be avoided and variances in national legislation would not offer a window of opportunity to criminals and to those who make use of legal loopholes in a manner that is sophisticated, structured and systematic, suggesting that their intention is clearly malevolent, to abuse the system rather than conduct normal operations

- **Strengthen the requirements on the function of corporate directors**

Directors should be held accountable for failing to take reasonable steps to prevent money-laundering, this should apply regardless of whether they are nominees or not. Information of this sort should, for issues of transparency and democratic legitimacy be made publicly available to the citizens, Journalists and NGOs among others

- **Reconsider and reinforce the rules regarding the due diligence**

Corporate registries and financial institutions should perform always on an accurate risk based approach in an attempt to verify that all information pertaining to the beneficial ownership is correct and that no margin for fraudulent or corrupt activity is allowed

- **Introduce requirements for enhanced due diligence**

In cases where politically exposed people are identified with the option of rendering void or otherwise limiting the transaction in question

- **Formation of a financial intelligence unit (FIU)**

Whose role shall be to monitor, assess and analyse suspicious transaction reports and contracts. This entity should operate within the context of the single supervisory mechanism that would be incorporated within the range of responsibilities of the Central Bank

(b) How a foreign investor may acquire voting of an enterprise in an economy

- By incorporating a wholly owned subsidiary or company anywhere
- By acquiring shares in an associated enterprise
- Through a merger or acquisition of unrelated enterprise
- Participating in an equity joint venture with another investor enterprise

(c) Two main areas of interaction between human rights law and Tax law

Tax and human rights have two main areas of interaction: -

- Taxation may be a tool to enforce the general social and legal values (including human rights) of a nation beyond its borders
- Taxation may interfere with international human rights standards i.e. pursuing taxpayer offenders in their resident or home country.

### SOLUTION THREE

- (a) (I) Under the concept of source tax is imposed on the basis of the relationship of the income to the taxing state  
 (ii) Under the concept of residence tax is imposed based on the relationship of the taxpayer to the taxing state based on residence or nationality.  
 (iii) Benefits of globalization on a nation

#### 1) Foreign Direct Investments

FDI tends to increase at a much greater rate than the growth in world trade, helping boost technology transfer, industrial structuring and the growth of global companies

#### 2) Technological innovation

Increased competition from globalization helps stimulate new technological development, particularly with the growth in FDI, which helps improve economic output by making processes more efficient.

#### 3) Economies of scale

Globalization has enabled large companies to realize economies of scale that reduce costs and prices, which in turn support further economic growth, although this can hurt many small businesses attempting to compete domestically

- (b) (i) George Katongo Mwale came back to Zambia in 2019 and has lived in Zambia since that time. An individual is resident in Zambia if he or she is **physically present** in Zambia for a period of **not less than 183 days** in a **charge year**. George Katongo Mwale was physically present in Zambia a period of at 183 days (the whole charge year). In addition, individuals who **normally live** in Zambia are resident and ordinarily resident in Zambia. This also **applies to George Katongo Mwale** who regained his citizenship by resumption in 2019.

(ii) George Katongo Mwale

#### Personal Income Tax computation for the charge year 2021

	K	K
- Salary (105,000 x 10)		1,050,000
- Housing allowance		125,000
- Salary (Part-time)		160,000
- Foreign dividends (9000 x 100/90)		<u>10,000</u>
		1,345,000
Less:		
- NUCLEAR PROFESSION subscriptions		<u>25,000</u> )
- Taxable income		1,320,000

Income Tax computation:

- 48,000 x 0%	0
- 9,600 x 25%	2,400
- 25,200 x 30%	7,560
- 1,237,200 x 37.5%	<u>463,950</u>
-	
473,910	
Less:	
- Double Taxation Relief (DTR) (W1)	(1,000)
- Tax already paid – PAYE	<u>(480,000)</u>
Final income tax payable	<u>(7,090)</u>

WORKING

1. Double Taxation Relief (DTR)

Lower of:

(i) Foreign tax paid on dividend =  $K10,000 \times 10\%$  = K1,000

(ii) Zambian tax charge on foreign income =

$$\frac{\text{Gross foreign dividend}}{\text{Total assessable income}} \times \text{Zambian tax charge}$$

=  $\frac{10,000}{1,320,000} \times (473,910)$  = K3,590

Therefore the DTR is K1,000, which is the lower amount.

## **SOLUTION FOUR**

(a) Foreign direct investor

A foreign Direct Investor is an individual, an incorporated or unincorporated public or private enterprise, a government, a group of related individuals or related incorporated and or unincorporated which have a subsidiary, associate or branch operating in a country other than the country of residence of the foreign direct investor or investors

(b) Vertical FDI

This takes place when a firm through FDI moves upstream or downstream in the value chain

(c) Two methods of FDI

- By incorporating a wholly owned subsidiary or company elsewhere
- By acquiring shares in an associate company
- Through merger or acquisition of unrelated company
- Participating in equity joint venture

(d) Five possible incentives for FDI

- Tax holidays
- Low corporation tax
- Other tax concessions
- Special economic zones
- Export processing zones
- Free land
- Free subsidies
- Relocation
- Support in research and development

(e) Three possible advantages to the company investing in a foreign country

- Access to the market
- Access to resources
- Reduction in cost of production

Three disadvantages to the company investing in a foreign country

- Unstable economy
- Unstable political systems
- Poor legal systems

(f) Four possible advantages of FDI to the foreign company

- Infusion of foreign capital
- Increase in revenue
- Development of new industries
- Ability to learn from foreign investors

Three possible disadvantages of FDI to the foreign company

- Poor labour treatment
- Crowding of local development
- Political influence

(g) One reason why MNE's make FDI

- Market seeking
- Raw material seeking

**END OF SOLUTIONS**





TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

---

D6: TAX AUDIT AND INVESTIGATIONS

---

MONDAY 13 DECEMBER 2021

---

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 question paper consists of **FOUR (4)** questions of Twenty Five (25) marks each. You must attempt all the **FOUR (4)** questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. A Taxation table is provided on pages 2, 3 and 4.

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

## Taxation table for paper D6– Tax Audit and Investigations 2021 Examinations

### Income Tax

#### Standard personal income tax rates

<b>Income band</b>	<b>Taxable amount</b>	<b>Rate</b>
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

#### Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

#### Company Income Tax rates

On income from manufacturing and other		35%
On income from farming		10%
On income of Banks and other Financial Institutions		35%
On income from mineral processing		30%
On income from mining operations		30%
On income from manufacture of products made out of copper cathodes		15%

### Mineral Royalty

#### Mineral Royalty on Copper

<b>Range of Norm Price</b>	<b>Mineral Royalty Rate</b>
Less than US\$4,500	5.5% of norm value
From US\$4,500 to less than US\$6,000	6.5% of norm value
From US\$6,000 to less than US\$7,500	7.5% of norm value
From US\$7,500 to less than US\$9,000	8.5% of norm value
From US\$9,000 and above	10% of norm value

#### Mineral Royalty on other minerals

<b>Type of mineral</b>	<b>Mineral Royalty Rate</b>
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

## Capital Allowances

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

Wear and Tear Allowance –	Plant used normally	25%
	Used in Manufacturing and Leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

### Non- commercial vehicles

Wear and Tear Allowance	20%
-------------------------	-----

### Industrial Buildings:

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

### Low Cost Housing (Cost up to K20,000)

Wear and Tear Allowance	10%
Initial Allowance	10%

### Commercial Buildings

Wear and Tear Allowance	2%
-------------------------	----

### Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

## Presumptive Taxes

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

### Presumptive Tax for Transporters

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

### Property Transfer Tax

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

### Value Added Tax

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

### Customs and Excise duties on used motor vehicles

<b>Motor vehicles for the transport of ten or more persons, including the driver</b>	<b>Aged 2 years but below 5 years</b>		<b>Aged 5 years and over</b>	
	<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

<b>Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars</b>	<b>Aged 2 years but below 5 years</b>		<b>Aged 5 years and over</b>	
	<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>
<b>Sedans</b>				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642

**Hatchbacks**

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

**Station wagons**

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

**SUVs**

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

**Aged 2 years but below 5 years****Aged 5 years and over****Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):**

Customs duty	Excise duty	Customs duty	Excise duty
K	K	K	K

**Single cab**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, <b>with spark ignition internal combustion piston engine</b>	30,697	13,302	24,119	10,452

**Panel Vans**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601

**Trucks**

GVW up to 2 tonnes	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding	28,504	12,352	13,156	5,701

5.0 tonnes				
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,461	0
GVW exceeding 20 tonnes, <b>with spark ignition internal combustion piston engine</b>	37,086	28,432	13,907	10,662

### **Surtax**

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

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

#### **Duty rates on:**

- 1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:**

**Customs Duty:**

Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000

**Excise Duty:**

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%
- 2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:**

**Customs Duty**

Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000

**Excise Duty:**

Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
--	-----
- 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%
--	----

**All FOUR (4) questions are compulsory and MUST be attempted.**

**QUESTION ONE**

- (a) Mwila & sons is a family owned transportation business which is currently being run as a partnership. Mr. Mwila is now considering incorporating the business and run it as a limited company. The company will be known as Travellers Express Limited. He is not sure if this will be beneficial.

**Required:**

- (i) Explain what is meant by incorporation. (3 marks)  
(ii) Explain three (3) legal benefits of incorporating the business. (6 marks)
- (b) Explain what is meant by transfer pricing and arm's length principle. (3 marks)
- (c) Briefly explain the following financing terms and their tax treatment:
- (i) Preference shares. (3 marks)  
(ii) Debentures. (3 marks)  
(iii) Ordinary (equity) shares. (3 marks)
- (d) Explain any four (4) sources of information you can request from the taxpayer that can help to uncover hidden income. (4 marks)

**[Total: 25 marks]**

**QUESTION TWO**

Investigations for violations and offences are an important phase in the administration and enforcement of the tax laws by Zambia Revenue Authority. The indications of intent to evade tax are usually discovered during the course of an audit. Intent to evade tax involves false documents or returns, statements, and includes attempted evasion, conspiracy to evade, aiding, betting, or counselling for evasion and wilful failure to file income tax returns. It is essential to be able to recognize indications of intent to evade tax in order to promptly take the appropriate actions during an audit. The recommendation of prosecution for intent to evade tax is a serious matter which demands careful consideration of all the facts and circumstances in each case.

**Required:**

- (a) Explain how the Tax Auditor can establish intent to evade tax by the taxpayer. (4 marks)
- (b) Explain the following causes of defaults and their tax consequences:
- (i) Willful default. (3 marks)  
(ii) Default due to Fraud. (3 marks)  
(iii) Default due to Negligence. (3 marks)
- (c) Explain what is meant by Investigative approach and its importance in relation to tax audits. (6 marks)
- (d) Explain what is meant by the taxpayer segment model and how it helps in organizing the taxpayer audit function. (6 marks)

**[Total: 25 marks]**

### **QUESTION THREE**

You are a Tax Auditor dealing with the affairs of Changwe. She has been chosen by ZRA as part of the tax audit programme. Changwe, a Zambian resident individual, is a sole trader running the business as a sole trader. Her annual turnover has always exceeded K800,000. The following statement of profit or loss has been extracted from her books for the year ended 31 December 2021:

		K	K
Gross profit			230,000
Add: Other income			
Dividends (net)	(Note 1)	19,500	
Bank deposit interest (gross)	(Note 1)	<u>10,000</u>	
			<u>29,500</u>
			259,500
Less:			
Rent and Rates	(Note 2)	8,000	
Repairs to the buildings	(Note 3)	9,000	
Depreciation		4,500	
Entertainment expenses	(Note 4)	7,000	
Bad debts	(Note 5)	9,500	
Electricity		3,900	
Wages and salaries	(Note 6)	<u>50,000</u>	
Total expenses			<u>91,900</u>
Net profit			<u>167,600</u>

The following additional information is relevant:

#### **Note 1: Investment income**

These were all generated from Zambian resident companies. Withholding tax had already been deducted at source.

#### **Note 2: Rent & Rates**

It has been agreed with the Commissioner General that a quarter ( $\frac{1}{4}$ ) of rent & rates relates to Changwe's living accommodation.

#### **Note 3: Repairs to the buildings**

The amount of repairs to buildings, include K2,000 as payments for extensions to the buildings.

#### **Note 4: Entertainment expenses**

Entertainment expenses include K3,000 paid for entertaining customers and K2,000 for suppliers. The balance relates to expenses incurred to entertain employees.

#### **Note 5: Bad debts expenses**

This includes K7,000 increase in general provisions for bad debts, trade debts written off K5,000 and K2,500 decrease in specific provision for bad debts.



### **Note 6: Wages & salaries**

The amount for salaries and wages include K11,700 nominal salary for Changwe. The balance represents salaries & wages paid to employees.

### **Note 7: Other information**

During the year ended 31 December 2021, Changwe bought a Light Truck at a cost of K80,000 and a Motor Car at a cost of K75,000. It has been agreed with the Commissioner General that Changwe's private use in the Motor Car was 30% in the tax year 2021. Capital allowances on other assets have been agreed at K5,000 for the tax year 2021.

### **Required:**

- (a) Explain any five (5) key elements of the legal framework as it relates to the tax audit function. (5 marks)
- (b) Explain what is meant by the following types of tax audits:
  - (i) Full tax audits. (2 marks)
  - (ii) Limited scope tax audits. (2 marks)
  - (iii) Single issue tax audits. (2 marks)
- (c) Calculate the amount of income tax payable by Changwe for the tax year 2021. (11 marks)
- (d) Explain the importance of working papers in relation to tax audits. (3 marks)

**[Total: 25 marks]**

### **QUESTION FOUR**

The government collects taxes through the Zambia revenue authority (ZRA). All tax payers, including those in the Telecommunication sector that are carrying on inter-charges, are expected to contribute to the country's taxation. They are expected to submit the returns to ZRA with details of possible tax liability. However, it could be expensive and risky for those companies in the telecommunication industry that are registered in a foreign country. They are likely to experience more taxes and the risk of foreign exchange exposure. One way of reducing exposure to risk is by the use of derivatives. The ZRA may use administrative or self-assessment when assessing the tax return of the tax payer.

The only problem is that the self -assessed tax may not be correct as expected and in most cases the tax payer may fail to comply with tax obligations. In such cases, a tax audit can be initiated and a number of sanctions imposed on the tax payer. Therefore, a tax audit is required to ascertain the correctness of the tax liability and whether the tax payer has fulfilled the expected obligations. However, it's always important that the tax audit meets certain benchmarks also known as qualitative characteristics.

**Required:**

- (a) Explain four (4) elements of a qualitative tax audit. (4 marks)
- (b) Explain what tax investigation is and the reasons why it can be constituted. (6 marks)
- (c) Explain the misrepresentations which can cause sanctions to be imposed on tax payers. (6 marks)
- (d) In relation to the Telecommunication sector;
  - (i) Explain inter-connection charges and their impact on VAT liability. (4 marks)
  - (ii) Explain the meaning of the term derivatives and how they can be used by a business in the telecommunication sector. (5 marks)

**[Total: 25 marks]**

**END OF PAPER**

## **D6 TAX AUDIT AND INVESTIGATION SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

#### (a) Incorporation of the business

- (i) Incorporation is the process of legally declaring a corporate entity as separate from its owners.

It is the forming of new corporation, being a legal entity that is effectively recognised as a person under the law.

In practical terms incorporating means the association becomes a body corporate with perpetual success which means it may exist forever, even as its membership changes.

(1 mark per valid point up to 3 marks)

- (ii) Three (3) legal benefit of Traveller Express incorporating its business:

1. Protection of personal assets

One of the most important legal benefits is the safeguarding of personal assets against the claims of creditors and lawsuits. In a corporation, however, stockholders, directors and officers typically are not liable for the company's debts and obligations.

Mr Mwila and his family would therefore be limited in liability to the amount they have invested in the corporation.

2. Transferable ownership

Ownership in a corporation is easily transferable to others, either in whole or in part.

3. Taxation

Corporations are taxed at a lower tax rate than individuals. Also, they can own shares in other corporations and receive corporate dividends eighty-five per cent tax free.

- (b) Transfer pricing refers to the allocation of profits for tax and other purposes between parties of multinational corporate group.

Transfer prices are set on goods and services transferred between members of a corporate group in such a way that profits are shifted from a higher tax region to a lower tax region in order to minimise the overall tax liability.

The arm's length principle of transfer pricing therefore, states that the amount charged by one related party to another for a given product must be the same as if the parties were not related.

- (c) Financing terms and their tax treatment

- (i) Preference shares

These are shares with no voting rights and have a fixed percentage dividend before any dividend is paid to the ordinary shareholders. The arrears of dividend on cumulative preference shares must be paid before any dividend is paid to ordinary shareholders.

A preference share dividend is not a deductible expense for the company. Therefore, there is a tax disadvantage for the company.

(ii) Debenture

A debenture is one of the most typical forms of long term loans that a company can take. It is normally a loan should be repaid on a specific debt.

Some debentures are irredeemable securities and sometimes referred to as perpetual debentures. The majority of debentures come with a fixed interest rate.

Issuing of debenture results in interest expense for the borrower which is a tax-deductible expense for as long as the debenture is not used to finance the purchase of a non-current asset. This means that the company can claim an interest against its profits.

(iii) Ordinary (equity) Shares

Ordinary shares are shares with voting rights and are issued to the owners of the company. The ordinary share dividend is only payable when there are sufficient profits available for distribution by the company and the dividend is not fixed.

Ordinary dividend is not a deductible expense for the company, therefore, the company will have an increased cost.

(d) The following are the sources of information:

1. Tax returns submitted by the taxpayer (VAT returns, Income Tax returns and Property Transfer Tax).
2. Checking account statements and cancelled cheques.
3. Savings accounts and money market funds.
4. Loan applications and personal net worth statements at banks.
5. Lifestyle analysis.
6. Bank statements to analyse cash deposits, checks and to whom checks are written.
7. Credit card receipts for purchase.

## **SOLUTION TWO**

- (a) The following is how the tax auditor can establish intent to evade tax by the taxpayer:
1. Intent to evade assessment or taxation may be established by use of direct evidence or a specific false statement, book entry, item not properly reported on the return, etc.
  2. Intent may also be established indirectly by use of the net worth, source and application of funds, and other income reconstructions methods to show that the income on the return is an understatement of the correct income.

(b) Causes of defaults and their tax consequences:

(i) Wilful default

This is where the taxpayer deliberately omits income or increase expenses so the profit can be reduced which eventually reduces the tax liability.

The consequences of wilful default results into the penalty of 35% of the omitted income or expenses overstated, this is with regards to income tax.

In the case of Turnover tax, the penalty is 3% of the omitted sales and it may result into imprisonment.

(ii) Default due to Fraud

This is a conscious attempt of evading or defrauding the revenue authority and evading tax laws.

The consequences of tax fraud may result into a penalty of 52.5% of the unpaid amount of income taxes.

In the case of Turnover tax, it is 4.5% of the omitted sales. Besides the penalties mentioned fraud may result into imprisonment as well.

(iii) Default due to Negligence

This is the failure to make a reasonable attempt to comply with tax laws. For instance, if the taxpayer doesn't know if he/she qualifies for a deduction and instead of checking he or she just claims it. Negligence entails carelessness when filling returns and failure to keep adequate accounting records.

The consequences of negligence results into the penalty of 17.5% of the omitted income or expenses overstated, this is with regards to income tax.

In the case of Turnover tax, it is 1.5% of the omitted sales; it may also result into imprisonment.

(c) Investigative approach

This is an audit technique which uses information from either the taxpayer or from other sources. It requires judgement, imagination and using information outside the accounting records to perform the tax audit.

Field examinations are also utilised as opportunities for gathering information on significant events such as backdoor trade, disguised transaction, shift of investments and other data concerning transactions by the tax auditor in charge as having potential linkage with discovery of irregularities.

Investigative approach is of great importance to the auditor's work where the auditor sees no clear audit trail and the accounting records of the taxpayer are much difficult to access.

(d) The taxpayer segment model

Taxpayer segment model is recent development model among small number of developed countries to organise service and enforcement functions principally around segments of taxpayers.

The model focuses much on particular segments of taxpayers e.g. large businesses, high net worth individuals, SMEs etc.

The reason for organising these functions around the taxpayer segments is that each group of taxpayers has different characteristics and tax compliance behaviours and, as a result, presents different risks to the revenue.

In order to manage these risks effectively, the tax authority needs to develop and implement strategies that are appropriate to the unique characteristics and compliance issues presented by each group of taxpayers.

Grouping key functional activities within a unified and dedicated management structure increases the prospects of improving overall compliance levels among taxpayers.

### SOLUTION THREE

(a) The following are the key elements of the legal framework:

1. Taxpayers' record keeping obligation.
2. Giving tax officials access to taxpayers' books and records.
3. Giving tax officials access to third party information sources.
4. Obtaining information from other countries' tax authorities.
5. Powers of tax authorities to amend tax returns submitted by the taxpayers.
6. Sanctions for non-compliance with tax laws.

(b) Types of tax audits

(i) Full tax audit

This is a comprehensive examination of all information relevant to the calculation of a taxpayer's tax liability for a given tax year. The main objective of this type of audit is to determine the correct tax liability for a tax return as a whole.

(ii) Limited scope tax audits

This is a tax audit which is confined to a specific issue on a tax return and/or tax scheme arrangement employed by the tax payer. The main objective of this audit is to examine key potential risk areas of non-compliance.

(iii) Single issue tax audits

This is a tax audit which is confined to one item of potential non-compliance that may be apparent from examination of a taxpayers return. This audit normally consumes less time.

(c) Changwe

Income tax payable for the tax year 2021

	K	K
Net profit as per accounts		167,600
Add:		
Rent & rates: K8,000 x ¼	2,000	
Repairs	2,000	
Entertaining customers	3,000	
Entertaining suppliers	2,000	
Depreciation	4,500	
Increase in general provision	7,000	
Changwe's salary	<u>11,700</u>	
		<u>32,200</u>
		199,800
Less:		
Dividends	19,500	
Bank interest	10,000	
Capital allowances (w)	<u>35,500</u>	
		<u>(65,000)</u>
Taxable income		<u>134,800</u>

Computation

First K48,000 @0%	0
Next K9,600 @25%	2,400
Next K25,200 @30%	7,560
Balance K52,000 @37.5%	<u>19,500</u>
Income tax payable	<u>29,460</u>

Workings	
Capital allowances	K
Light Truck: K80,000 x 25%	20,000
Motor Car: K75,000 x 20% x 70%	10,500
Other capital allowances	<u>5,000</u>
Total capital allowances	<u>35,500</u>

(d) Working papers are a vital too because:

1. They assist the team leaders and other officers who may be dealing with the case at a later stage.
2. They are the connecting link between the examination of a taxpayers' affairs and the audit report.
3. They can be evaluated as part of the Quality Assurance process.



## **SOLUTION FOUR**

- (a) The following are the four elements of qualitative tax audit:
1. The tax payer's accounts and records have been reviewed in sufficient details in order to reach a supportive conclusion regarding all items of a material tax consequence.
  2. The appropriate income tests have been performed where necessary to ensure that proper and complete reporting of income regardless of the source.
  3. That the responsibilities of the tax payer regarding the filling in of all tax returns have been ascertained.
  4. That the conclusions expressed are documented insufficient details to enable the reader to comprehend the process that led to the conclusions to be reached.
- (b) Tax investigation is an in-depth examination process by the tax authority in order to recover tax undercharged in the previous years of assessment. It includes a check that all the documents submitted to the tax administration are correct and complete including supporting documentation. This means that the taxpayer needs to keep good records at all times and maintain them for potential enquiries.  
The following are the reasons why a tax investigation can be constituted:
1. If the tax authority has reasons to believe that some aspects of the taxpayer's return or business accounts are wrong.
  2. If the tax authority has been tipped off that the taxpayer might be evading tax or suspicion of tax fraud on the part of the taxpayer.
  3. If the taxpayer consistently reports losses
  4. If the tax investigation is part of the tax dispute resolving process.
- (c) The following conditions which may bring sanctions if not complied with are:
1. Under-estimation of the tax liability resulting from unintended errors, ignorance of misinterpretation of facts and or laws.
  2. Understatements of liability resulting from carelessness or reckless acts.
  3. Understatement of liability resulting from deliberate and/fraudulent acts.
  4. The failure to keep adequate records and books of accounts.
  5. The failure to supply the requested information relevant to the conduct of audit inquiries.
  6. Tax evasion offences can be subjected to prosecution under criminal laws and in most cases lead to terms of imprisonments and/or fines.
- (d) Telecommunications
- (i) An interconnection charge is an average levied by the network operators on other service providers to recover the cost of the interconnection facilities (including the hardware and software for routing, signalling and other basic service function) provided by the network providers.  
It is important to understand the cost-benefit analysis in order to reduce incidences of tax avoidances.  
The impact of huge charges may reduce the VAT liabilities of most owners of handsets and operators which will result in tax evasion.

However, the impact on revenue of VAT and import duties if lowered, would broaden the formal sector at the expense of the informal sector, the diffusion of more quality handsets and more importantly a fall in the cost of collection of the VAT and import duties and probably an increase in revenue for the government.

- (ii) Derivatives are contracts between two parties that specify conditions under which payments are to be made between two parties.  
It can be defined as a financial instrument that derives its value from an underlying asset. The most common underlying assets are commodities, stocks, bonds, interest rates and currencies.  
The main types of derivatives are privately traded over-the counter derivatives such as swaps that do not go through an exchange or other intermediary, and exchange traded derivatives.  
Derivatives can be used either for risk management to hedge for undesirable event such as exchange losses or for speculation.  
A telecommunication company can enter into a future contract at a fixed price so that any currency fluctuation does not affect the amounts on invoiced services.

**END OF SOLUTIONS**