



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D1: BUSINESS INFORMATION MANAGEMENT

WEDNESDAY 16 JUNE 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

When making decisions in business, many aspects should be considered while group decision making is encouraged.

- (a) Explain any five (5) positives of individual decision making? (10 marks)
- (b) Most information systems use a database to store information.
 - (i) Distinguish between a database and a database management system (DBMS). (8 marks)
 - (ii) Explain any one (1) method that can be used to measure performance of the computer system being used to run the database. (4 marks)
- (c) State any three (3) strategies that a company can adopt before deciding how it can use its information systems. (3 marks)

[TOTAL: 25 Marks]

QUESTION TWO

- (a) Any information system is prone to *unintentional threats* such as human errors and *deliberate threats*, which are both two forms of dangers that may expose the system.
 - (i) Mention any four (4) common types of deliberate threats that a taxation information System may be subjected to. (4 marks)
 - (ii) To protect an information system, an organization can implement controls. State any five (5) Things that could be used to implement access control. (5 marks)
- (b) Data flow diagrams (DFD) are one of the process models used to understand systems operations during systems requirements investigation.

Using diagrams, explain the symbols used in Data Flow Diagram (8 marks)
- (c) Give two (2) advantages and two (2) disadvantages of open and closed questioning techniques during interviews. (8 marks)

[TOTAL: 25 Marks]

QUESTION THREE

- (a) Most organisations have stopped offering certain services such as payroll, cleaning etc. in house. Instead such services are being outsourced.

Describe four (4) types of outsourcing. (8 marks)

- (b) An initial study determines whether the suggested solution is *feasible* or not.

Clearly explain the term '*feasible*' in the context presented above. Indicate how a feasibility study is conducted and give appropriate examples. (8 marks)

- (c) Managers at different levels of the organisation make decisions which may be structured, semi-structured and unstructured.

Describe each of the types of decisions mentioned above and state the level of management they are found. (9 marks)

[TOTAL: 25 Marks]

QUESTION FOUR

Privacy is the right of the individual to control the use of information about him or her including information on financial status, health and lifestyle.

- (a) Explain the importance of privacy in business organisations (3 marks)

- (b) Outline the eight (8) principles of Data Protection with which the users must comply (8 marks)

- (c) Intranets are an important component of an organization's information technology setup. Companies set up their own intranet using a combination of the company's own networked computers and the internet technology.

Explain any four (4) benefits of having an intranet? (4 marks)

- (d) Explain the term HCI (4 marks)

- (e) Distinguish between collaborative tools and communications tools giving an example of each (6 marks)

[TOTAL: 25 Marks]

END OF PAPER

D1: BUSINESS INFORMATION MANAGEMENT SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Advantages of Individual Decision Making:

- (i) Sometimes it is difficult to timetable decision making activities together as a group. It is easier as an individual.
- (ii) More risky decisions due to 'group think', if they don't pay off!
- (iii) Slower decision making process, compared to one person making the decision – no conflict between members, different viewpoints, etc. when individual decision making.
- (iv) If you work as a group, the dominant member of the group may take over the decision making and serve to 'side-line' other people's views, and s/he may make a worse decision than if any of the other participants had been making the decision on their own.
- (v) Some members will not participate fully

(b)

(i) Differences between databases and DBMS

Database:

- Shared collection of logically related data (and a description of this data), designed to meet the information needs of an organization.
- System catalogue (metadata) provides description of data to enable program–data independence.
- Logically related data comprises entities, attributes, and relationships of an organization's information.

Database management system:

- A software system that enables users to define, create, and maintain the database and that provides controlled access to this database.
- DBMS is software that facilitates the management of a database.
- A relational database is perceived by user as a collection of tables for data storage. Tables are a series of row/column intersections (a row corresponds to a record, a column to a field)

(ii) KPI is usually used to measure performance

- Understand the organisational objectives and how you plan on achieving them
- Its an iterative process that involves feedback from analysts, managers and HODs

- How outcomes will be influenced and the person responsible for the business outcome
- How often will reviews progress towards the outcome
- How will objectives increase sales revenue or allow the business to become profitable

(ii) Strategies a company can adopt and use in its Information System

- Cost leadership strategy
- Differentiation strategy
- innovation strategy
- Operational effectiveness strategy
- Customer-orientation strategy.

SOLUTION TWO

(a)

- (i) Any three (3) of the following will be correct; Espionage or trespass, Information extortion, Sabotage or vandalism, Theft of equipment or information, Identity theft, Software attacks, Supervisory control and data acquisition (SCADA) attacks.
- (ii) Access controls restrict unauthorized individuals from using information resources. These controls involve two major functions: authentication and authorization.

Authentication confirms the identity of the person requiring access. To authenticate someone Information systems can use biometrics (fingerprint, iris, face, signature, gait, voice), ID cards, Smart Cards or tokens and passwords or Personal identification numbers. After the person is authenticated (identified), then next step is authorization.

Authorization determines which actions, rights, or privileges the person has, based on his or her verified identity. Once users have been properly authenticated, the rights and privileges they have on the organization's systems are established in a process called authorization. A privilege is a collection of related computer system operations that a user is authorized to perform.

(b) DFD symbols

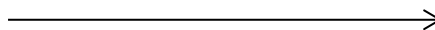
Entity: represents an
Object of interest



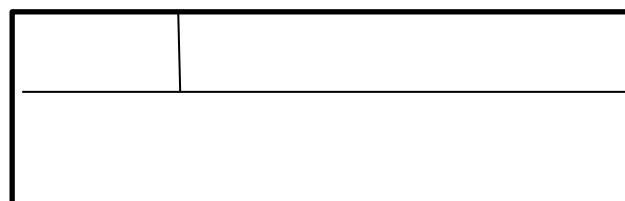
Data store



Data flow



Process



(c) Questioning Techniques in interviews

(i) 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

(ii) Disadvantages

Structured interviews

- Difficult to develop
- Questions may be known in advance

Unstructured interviews

- Easy to lose track
- Harder to compare

SOLUTION THREE

(a) Types of outsourcing

- Professional outsourcing – all specialised services e.g. accounting, purchasing
- Multi-sourcing – provides you with a mix of IT and other business functions. Its suitable for large companies that have to outsource a variety of IT operations and infrastructure to different vendors
- Process-specific outsourcing – contract a provider for a specialist service e.g. Legal, Human Resource Management, Accountancy
- Business Process Outsourcing – to handle mundane business activities such as administration, correspondence and scheduling
- Manufacturing outsourcing – can be out of reach for small business particularly when demand starts to increase. It's the only way to compete with large companies that have more resources. E.g. reduced cost of pay factory, workers, equipment, infrastructure
- Project outsourcing – It focused on getting a project done, because a lot of people don't have time to focus on project activities and lack the project skills

(b) A feasibility study is a formal study to decide what type of system can be developed which best meets the needs of the organisation.

A team is appointed to carry out the study (although individuals might be given the task in the case of smaller projects). The team should comprise of a person or people from affected departments and someone with a detailed knowledge of computers and systems design.

This team will among other things establish:

- If the current system meets the business requirements
- If an alternative system can meet these requirements
- Recommendations of the most suitable system to meet the requirements
- The cost budget
- A draft plan for implementation within a specified timescale
- Whether the hoped-for benefits will be realised

(c) Types of decisions

- (i) Structured decisions are repetitive and routine, and decision makers can follow a definite procedure for handling them to be efficient. Structured decisions are main made at the lowest level of management ie the operational level
- (ii) Semi-structured decisions are those in which only part of the problem has a clear-cut answer provided by an accepted procedure
- (iii) Unstructured decisions are those in which the decision maker must provide judgment, evaluation, and insights into the problem definition. These decisions are usually made at the strategic level

SOLUTION FOUR

(a) Importance of privacy

- Misuse of information
- Individuals could be harmed by existing computerised data
- Inaccurate or misleading information

(b) Principles of Data Protection Act

- Personal data shall be processed fairly and lawfully
- Personal data shall be obtained only for one or more specified and lawful purposes
- Personal data shall be adequate and relevant
- Personal data shall be accurate and kept up to date
- Personal data shall be processed for any purpose and kept for longer than necessary for that purpose
- Personal data shall be processed in accordance with the rights of data subjects under this act
- Appropriate technical and organisation measures shall be taken against unauthorised or unlawfully processing of personal data
- Personal data shall not be transferred to the country

(c) When a corporation creates an intranet, it enables employees to have quicker access to internal information and to share knowledge so that they can do their jobs better.

Benefits of having intranet include:

- i. Enhanced employee engagement
- ii. Increased productivity
- iii. Better connection and collaboration of distributed employees
- iv. Streamlined communication of change management

(d) HCI stands for Human Computer Interaction which is concerned with how people interact with computer and to what extent computer are or are not designed for successful use by users

(e) Collaborative tools are different types of software and online tools that enable people to work together on common projects or assignments despite being in different locations. Such tools as dropbox, gmail etc.

Communication tools are used for communication between individuals in different locations eg mail, email, conference calls etc

END OF SOLUTION



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D2: FINANCIAL MANAGMENT

FRIDAY 18 JUNE 2021

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9. Formulae, Present Value, and Annuity tables are provided at the end of this question paper.

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Attempt all FOUR (4) Questions.

QUESTION ONE

A not for profit company, Lorenz Limited is considering a project to manufacture electronic components, A and B. Relevant data on the components is provided below.

COMPONENT	A	B
Initial Investment cost (capital cost)	K1,176,000	K2,448,000
Selling price per unit	90	120
Variable costs per unit	66.0	30.0
Apportioned overheads per unit	4.5	6.0
Initial working capital requirement	K756,000	K1,728,000
Research and development expenditure	K168,000	K214,000
Sales units per annum	15,000	7,200

Both of the components (A and B) are expected to be replaced by another component at the beginning of year four (4). The working capital investment for each component is expected to remain constant for the next three years. It will be recovered in full at the end of year three.

Selling price inflation is expected to be 10% per annum beginning from year two. Variable costs inflation is expected to be 5% per annum beginning from year one. .

The company's cost of capital is estimated to be 20%.

Required:

- (a) Calculate the Net Present Value (NPV) of each component and advise the company which component it should invest in. (12 marks)
- (b) Assuming that the funds available for investment are restricted to K1.5 million, advise the company which project it should invest in. Assume that the investments are divisible and not mutually exclusive. (5 marks)
- (c) Assuming there are no fund restrictions and these components are mutually exclusive, advise the company which project it should invest in. (3 marks)
- (d) Explain five (5) objectives of a not-for-profit organization. (5 marks)

[Total: 25 Marks]

QUESTION TWO

DFG Co. is considering the suggestion that the order size for its product should be determined using the economic order quantity model (EOQ). The company forecasts that the annual demand for the product will be 250,000 units in the coming year and it has normally ordered 15% of annual demand per order. The ordering cost is expected to be K700 per order while the holding cost is expected to be K1.5 per unit per year. A buffer inventory of 7,000 units of the product will be maintained, regardless of whether the orders are made by the current method or using the economic ordering quantity model.

DFG Co. mainly sales its product on credit and the annual credit sales is K20 million, and two months are allowed for payment. However, the company has decided to offer a 3.5% discount for payments made within 15 days of the invoice being sent, and to reduce the maximum time allowed for payment to one month. It is estimated that 75% of customers will take the discount. The company requires a 35% return on investments.

Required:

- (a) Calculate the cost of the current ordering policy and determine whether the economic order quantity would result in saving in inventory costs. (15 marks)
- (b) Advise whether DFG Co. should adopt the new credit policy or not. You may assume that the volume of sales will be unaffected by the discount. (10 marks)

[Total: 25 Marks]

QUESTION THREE

The Directors of Btel Ltd, a private telecommunication company, are considering a proposed resolution for converting the company to a public company and listing its stock on LuSe. The Directors expect that the stock market listing can enhance Btel's ability to raise large amounts of capital from the public. However, they fear that stock market inefficiencies could have a negative effect on the price of Btel's equity stock.

Required:

- (a) Explain the three (3) degrees of *stock market efficiency*, and how the price of Btel is expected to respond in each case. (6 marks)
- (b) Btel is also considering taking over Starlite Ltd, a broadband private limited company. The board of Btel is in the process of making a bid for Starlite, and therefore requires to value the company. Btel Ltd has conservatively estimated its earnings up to 2022, when it expects to dispose the company as follows:

Year	2019 (K'm)	2020 (K'm)	2021 (K'm)	2022 (K'm)
Earnings Before Interest, Tax, Depreciation & Amortization (EBITDA)	6	6.2	6.3	6.3

The company's earnings yield is expected to be 12% up to the end of the four (4) year investment horizon.

Required:

- (i) Explain four (4) important roles performed by a Finance Manager in order for a corporate body to achieve its objectives. (10 marks)
- (ii) As the Finance Manager, calculate the value of the company based on the present value of expected earnings. (6 marks)
- (iii) Explain three (3) problems associated with using the P/E method for valuing firms. (3 marks)

[Total: 25 Marks]

QUESTION FOUR

ZCCM – IH Plc bought 70% of KCCM's equity share capital, two years ago on 1 January 2019 when the retained earnings of KCCM were K5 million. Statements of financial position as at the year ended 31 December 2020 were as follows:

	ZCCM - IH		KCCM	
	K'million	K'million	K'million	K'million
Non-Current Assets				
Property, Plant & Equipment		100		30
Cost of Investment in KCCM		34		
		134		30
Current Assets:				
Inventory	90		20	
Receivables	110		25	
Cash	<u>10</u>		<u>5</u>	
		210		50
		344		80
Equity:				
Share Capital		15		5
Retained earnings		159		31
		174		36
Non - current liabilities		120		28
Current liabilities		50		16
		344		80

The following information is relevant:

1. KCCM transferred goods to ZCCM - IH at a transfer price of K20 million at a mark-up of 25%. Half of the goods remained in inventory at the year-end. The current accounts in ZCCM - IH and KCCM stood at K25 million on that day.
2. Goodwill had suffered an impairment of K20 million since acquisition.
3. The ZCCM - IH group uses the fair value method to value the non-controlling interest. The fair value of the non-controlling interest at acquisition was K4 million.

Required:

- (a) Describe the circumstances under which a group of companies may claim exemption from preparing group financial statements, in line with *IFRS 10, Consolidated Financial Statements*. (5 marks)
- (b) Prepare the ZCCM - IH Group's consolidated statement of financial position as at 31 December 2020. (20 marks)

[Total: 25 Marks]

END OF PAPER

Formula Sheet

Economic order quantity

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

Miller – Orr Model

Return point = 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

$$E(r) = R_f + \beta_1(E(r_m) - R_f)$$

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

$$P_o = \frac{D_o(1+g)}{(r_e - g)}$$

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

$$s_1 = S_o \times \frac{(1+h_c)}{(1+h_b)}$$

$$f_o = S_o \times \frac{(1+i_c)}{(1+i_b)}$$

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)

COMPONENT A

INFLATION

	0	1	2	3
selling price		90	99	108.9
variable costs		69.3	72.765	76.40325
contribution		20.7	26.235	32.49675

NPV COMPUTATION

sales units		15000	15000	15000
		K	K	K
cash flows		310500	393525	487451.25
working capital	-756000	0	0	756000
Initial outlay	-420000			
NET Cash flows	-1176000	310500	393525	1243451.3
DF @ 15	1	0.833	0.694	0.579
PV'S	-1176000	258646.5	273106	719958.27

NPV **75711.1**

COMPONENT B

INFLATION

	0	1	2	3
Selling price		120	132	145.2
Variable costs		31.5	33.075	34.72875
contribution		88.5	98.925	110.47125

NPV COMPUTATION

Sales units		7200	7200	7200
		K	K	K
Cash flows		637200	712260	795393
Working capital	-1,728,000			1728000
Initial outlay	-720000			
Net cash flows	-2448000	637200	712260	2523393
DF's	1	0.833	0.694	0.579
	-2448000	530787.6	494308	1461044.5

NPV **38140.6**

The company should invest in project A since it has a higher NPV

(b)

COMPONENT	PV of inflows	Initial outlay	Ratio	Ranking
A	1251711	1176000	1.06438	1
B	2486141	2448000	1.01558	2

Project B has a higher PI and is therefore the first choice for investment.

The funds available should be invested as follows:

COMPONENT	initial outlay	Total NPV	% taken	Actual NPV
A	1176000	75711	100	75711
B	2448000	38140	13.23%	5048

(c)

If there are no fund restrictions and the components are mutually exclusive , the company should select the project which has the highest NPV . Therefore the company should select project A which has an NPV of K75711.

(d)Objectives of not-for-profit organizations

The welfare of employees

An organisation might try to provide good wages and salaries, comfortable and safe working conditions, good training and career development, and good pensions.

Sustainability

One of the first economic objectives of a non-for-profit is to raise enough money to meet its operating expenses in order to survive. These might include staffing needs, rent, utilities, insurance, furniture, computers and the other normal expenses of running a business.

Fundraising

A key economic goal of charities is to raise funds to meet their charitable purposes. The process of fundraising goes beyond holding events or sending out mailings. A complete development effort includes creating a database of regular donors, applying for grants, seeking individual and corporate donations.

Related and Unrelated Business Income

Some not-for-profit, especially trade associations that are not not-for-profit, seek to raise money by charging for dues, selling newsletter advertising, sponsorships, educational materials, holding events, seminars or a conference. If the sales don't relate directly to the organization's purpose, this is known as unrelated business income and is taxable. Unrelated business income is often a major financial objective of organizations with low dues and contributions. Dues are considered related business income.

Endowment

Many not-for-profit organizations have an economic objective of creating an endowment, which is a financial account that generates enough interest each year to fund charitable activities. Some not-for-profit set an objective of a specific amount for their endowment. Once the fund is fully endowed, the organization sets an annual spending objective for the interest earned.

Welfare of the society

Social objectives of business include production and supply of quality goods and services, adoption of fair trade practices and contribution to the general welfare of society and provision of welfare amenities.

SOLUTION TWO

(a)

Total cost of inventory = Ordering costs + Holding costs

Ordering costs:

Current order size= $15\% \times 250,000 = 37,500$

Number of orders = $250,000/37,500 = 6.67$ orders

Ordering costs = $6.67 \times 700 = \text{K}4,669$

Holding costs= $(7,000+37,500/2) \times 1.5 = \text{K}38,625$

Total cost of inventory = $4,669 + 38,625 = \text{K}43,294$

$$\text{EOQ} = \frac{\sqrt{2 \times 700 \times 250,000}}{1.5}$$

$$= 15,275.25 \text{ units}$$

Ordering costs:

Economic order size= $15,275.25$

Number of orders = $250,000/15,275.25 = 16.37$ orders

Ordering costs = $16.37 \times 700 = \text{K}11,459$

Holding costs= $(7,000+15,275.25/2) \times 1.5 = \text{K}21,956.44$

Total cost of inventory = $11,459 + 21,956.44 = \text{K}33,415.44$

Net savings = $\text{K}43,294 - \text{K}33,415.44 = \text{K}9,878.56$

(b)

Current receivables ($2/12 \times \text{K}20\text{m}$) = $\text{K}3.33\text{m}$

Receivables if new policy is adopted = $(15/365 \times 75\% \times \text{K}20\text{m}) + (1/12 \times 25\% \times \text{K}20\text{m}) = \text{K}1.04\text{m}$

Reduction in receivables ($\text{K}3.33\text{m} - \text{K}1.04\text{m}$) = $\text{K}2.29\text{m}$

Value of reduction in receivables = $(\text{K}2.29\text{m} \times 35\%) = \text{K}0.8015\text{m}$

Discount allowed = $(3.5\% \times \text{K}20\text{m} \times 75\%) = \text{K}0.525\text{m}$

Net Savings of the new policy ($\text{K}0.8015\text{m} - \text{K}0.525\text{m}$) = $\text{K}0.601\text{m}$

The company should adopt the new policy because it will result in a net saving of $\text{K}0.601\text{m}$.

S/N	DETAILS
a)	Current ordering costs
	Current holding costs
	Total current inventory
	EOQ
	Ordering costs
	Holding costs

	Total inventory cost
	Net saving
	Sub-total
b)	Current receivables
	Receivables new policy
	Reduction in receivables
	Value of reduction
	Discount allowed
	Net saving
	Conclusion

SOLUTION THREE

(a) The Three Basic Forms of the EMH

The efficient market hypothesis assumes that markets are efficient. However, the efficient market hypothesis (EMH) can be categorized into three basic levels:

Weak-Form EMH

The weak-form EMH implies that the market is efficient, reflecting all market information. This hypothesis assumes that the rates of return on the market should be independent; past rates of return have no effect on future rates. In this event that the stock market has weak-form efficiency, the price of Clear Tel will move in line with historical changes.

Semi-Strong EMH

The semi-strong form EMH implies that the market is efficient, reflecting all publicly available information. This hypothesis assumes that stocks adjust quickly to absorb new information. The semi-strong form EMH also incorporates the weak-form hypothesis. Given the assumption that stock prices reflect all new available information and Clear Tel purchase stocks after this information is released, Clear Tel cannot benefit over and above the market by trading on new information.

Strong-Form EMH

The strong-form EMH implies that the market is efficient: it reflects all information both public and private, building and incorporating the weak-form EMH and the semi-strong form EMH. Given the assumption that stock prices reflect all information (public as well as private) Clear Tel would not be able to profit above the average investor even if he was given new information.

(b)(i) The roles played by the financial managers are: Raising of Funds

In order to meet the obligation of the business it is important to have enough cash and liquidity. A firm can raise funds by the way of equity and debt. It is the responsibility of a financial manager to decide the ratio between debt and equity. It is important to maintain a good balance between equity and debt.

Allocation of Funds

Once the funds are raised through different channels the next important function is to allocate the funds. The funds should be allocated in such a manner that they are optimally used. In order to allocate funds in the best possible manner the following point must be considered:

- The size of the firm and its growth capability
- Status of assets whether they are long-term or short-term
- Mode by which the funds are raised

These financial decisions directly and indirectly influence other managerial activities. Hence formation of a good asset mix and proper allocation of funds is one of the most important activity.

Profit Planning

Profit earning is one of the prime functions of any business organization. Profit earning is important for survival and sustenance of any organization. Profit planning refers to proper usage of the profit generated by the firm.

Profit arises due to many factors such as pricing, industry competition, state of the economy, mechanism of demand and supply, cost and output. A healthy mix of variable and fixed factors of production can lead to an increase in the profitability of the firm.

Fixed costs are incurred by the use of fixed factors of production such as land and machinery. In order to maintain a tandem it is important to continuously value the depreciation cost of fixed cost of production. An opportunity cost must be calculated in order to replace those factors of production which has gone through wear and tear. If this is not noted then these fixed cost can cause huge fluctuations in profit.

Understanding Capital Markets

Shares of a company are traded on stock exchange and there is a continuous sale and purchase of securities. Hence a clear understanding of capital market is an important function of a financial manager. When securities are traded on stock market there involves a huge amount of risk involved. Therefore a financial manger understands and calculates the risk involved in this trading of shares and debentures.

It's on the discretion of a financial manager as to how to distribute the profits. Many investors do not like the firms to distribute the profits amongst shareholders as dividend instead invest in the business itself to enhance growth. The practices of a financial manager directly impact the operation in capital market.

Cash management (Working Capital Management)

Cash Management is an important aspect of your business because it provides you with a process of monitoring, analyzing and adjusting the cash flow of your business which will enhance liquidity and profits while also reducing risk.

Risk Management

The role of a Finance Manager is to communicate risk policies and processes for an organisation. They provide hands-on development of risk models involving market, credit and operational risk, assure controls are operating effectively, and provide research and analytical support.

(b)(ii) Btel Ltd

Year	K'000	DF (12%)	K'000
2019	6,000	0.893	5,358
2020	6,200	0.797	4,941.4
2021	6,300	0.712	4,485.6
2022	6,300	0.636	4,006.8
			18,792

The value of the company based on the present value of expected earnings is **K18,791,800.**

(b)(iii) Problems associated with P/E method for valuing firms

- **Doesn't account for growth-** The price to earnings ratio doesn't account for any type of growth or the lack of growth. The fact that growth isn't factored in means that older more mature stocks are typically going to appear cheaper even if they aren't growing if you use the P/E ratio. For many investors growth is a variable they do not want to exclude.
- **Backward looking-** The P/E ratio is actually a backward looking indicator if you use the company's most recent full year earnings number. A backward looking number can be of very little help to the investor during a period where economic conditions have changed significantly in a short period of time.
- **Quality of earnings not considered-** The last several months have been the perfect example of how a company can really inflate their earnings to look better than they really are. Many banks were able to do this for months, and because of that investors that solely used the P/E ratio would have thought they were great buys. In retrospect if the investor had been looking at other parts of the balance sheet they may have seen inflated earnings as a real issue.
- **The Price doesn't consider debt-** Companies with major debt issues are obviously higher risk investments, but the P in the P/E ratio only considers the equity price and does nothing with the debt that the business has to continue with operations. As we have found out over time, excess debt can be a real problem, and the market price of a stock isn't always a good gauge of fair value.
- **Uses profit which is not cash.**

SOLUTION FOUR

(a)

- The parent is a wholly owned subsidiary
- The parent's debt or equity instruments are not traded in a public market
- The parent did not file its financial instruments with a securities commission or regulatory organisation for the purpose of issuing instruments in a public market
- The ultimate parent company produces financial statements that comply with IFRS
- Subsidiaries may also be excluded from consolidation if they are held for resale or excluded on the grounds of immateriality.

(b)

ZCCM Consolidated SFP 31 December 2020

		K'million
Non - Current Assets		
Goodwill (W3)		8
Property, Plant & Equipment		
(100+30)		<u>130</u>
		138
Current Assets		
Inventory		
(90+20-2(W6))	108	
Receivables		
(110+25-25 (Intra-co receivable))	110	
Bank		
(10+5)	<u>15</u>	
		233
		371
Equity		
Share Capital		15.0
Group Retained Earnings (W5)		161.8
NCI (W4)		5.2
		182
Non - Current Liabilities		
(120 + 28)		148
Current Liabilities		
(50+16 - 25 intra-co payable)		41
		371

Group Holding = 70%, NCI = 30%

(W2) Net assets of subsidiary

	At Date of	Reporting	Post-
	acquisition	date	acquisition
	K'million	K'million	K'million
Share capital	5.0	5.0	-
Retained earnings	5.0	31.0	26.0
Share premium	-	-	-
Fair value adjustments if any (FVA)	-	-	-
Post-acquisition depreciation of FVA if any	-	-	-
PURP adjustment (if S is seller -W6)	-	(2.0)	(2.0)
	10	34	24
	to W3		to W4/W5

(W3) Goodwill	
	K'million
Fair value of consideration	34.0
Non-controlling interest at acquisition	4.0
Total	38.0
Subsidiary's net assets at acquisition (W2)	(10.0)
Goodwill at acquisition	28.0
Impairment	(20.0)
Goodwill at reporting date	8.0

(W4) Non-controlling interest (NCI)	
	K'million
NCI at acquisition (as per W3)	4.0
NCI [30% × 24] KCM'S share of post-acquisition reserves (W2)	7.2
NCI [30% × 20] goodwill impairment (FV method only)	(6.0)
NCI at reporting date	5.2

(W5) Consolidated reserves		K'million
Retained Earnings		
100% of ZCCM's reserves		159
[70% of 24] of KCCM'S post-acquisition reserves (W2)		16.8
[70% of 20] of Goodwill impairment attributable to parent (W5)		(14)
Gain on bargain purchase (W3)		-
PURP adjustment (if ZCCM was seller)		-
Reserves at reporting date		161.8

(W6)	%	K'million
COST	100	16.0
Profit (Mark-Up)	25	4.0
Price (Sales)	125	20.0
Half	0.5	2.0

END OF SOLUTIONS



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D3: BUSINESS TAXATION

WEDNESDAY 16 JUNE 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%
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Industrial Buildings:

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

Low Cost Housing (Cost up to K20,000)

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%
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Farming Allowances

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

Presumptive Taxes

Turnover Tax	4%
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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

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

SUVs

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

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, with spark ignition internal combustion piston engine	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, with spark ignition internal combustion piston engine	37,086	28,432	13,907	10,662

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

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

(a) Explain the meaning of the following in the context of company income tax:

- (i) Nominee of an effective shareholder (2 marks)
- (ii) Loan to an effective shareholder (4 marks)

(b) Modern Copper Mines (MCM) Plc, is engaged in the extraction and sale of copper in the Copperbelt Province of Zambia. It is a wholly owned subsidiary of Trans International Mining Company (TIMC) based in Canada. The statement of profit or loss for the year ended 31 December 2021 is provided below:

		K
Revenue	(Note 1)	37,250,820
Cost of sales	(Note 2)	<u>(12,400,500)</u>
Gross profit		24,850,320
Operating expenses	(Note 3)	<u>(2,900,400)</u>
Profit from operations		21,949,920
Other income	(Note 4)	<u>450,000</u>
Profit before tax		22,399,920
Income tax expense	(Note 5)	<u>(1,780,640)</u>
Profit for the year		<u><u>20,619,280</u></u>

The following additional information is available:

- (1) The revenue figure is the norm value of copper for mineral royalty tax purposes. The average copper price in the tax year 2021 was \$4,950 per metric tonne according to the London Metal Exchange (LME). Mineral royalty tax paid during the tax year has not been accounted for in the statement of profit or loss shown above.
- (2) Cost of sales includes depreciation charges on old smelter equipment amounting to K1,620,450 and amortization charges on development expenditure amounting to K1,130,800.
- (3) Included in the operating expenses is expenditure on the construction of a mine road amounting to K650,000, construction of a community school at a cost of K1,140,000, expenses on entertaining customers amounting to K173,300 and repairs amounting to K710,400. The remainder consists of drilling and environmental expenses.
- (4) Included in other income is profit on sale of drilling equipment amounting to K140,000 and royalties amounting to K310,000 (gross). Withholding tax was deducted at source from the royalties and paid on the appropriate due dates.

(5) The income tax expense represents the provisional income tax paid by the company during the tax year 2021.

(6) At 1 January 2021, MCM plc held the following implements, plant and machinery qualifying for capital allowances:

	Income Tax value	Original cost
	K	K
Motor vans	250,000	500,000
Drilling equipment	125,000	625,000

During the year ended 31 December 2021, the company had the following transaction in capital assets:

	Cost/(Proceeds)
	K
Bought Toyota Prado Car (3100cc)	350,000
Bought Range Rover Car (3200cc)	710,000
Bought Smelter Equipment	1,625,000
Sold Drilling equipment (note 4)	(460,000)

The Range Rover and Toyota Prado Cars are used by the Managing Director and Chief Operating Officer respectively on a personal-to-holder basis. It has been agreed with the Commissioner General that private use in each car is 55%.

Required:

- (i) Calculate the tax adjusted mining profit for MCM Plc for the tax year 2021.
(14 marks)
- (ii) Calculate the total income tax payable by the company for the tax year 2021.
(5 marks)

[Total: 25 Marks]

QUESTION TWO

John Masauso, a Zambian resident, runs a business as a wholesaler. His annual turnover has always exceeded K800,000. During the tax year 2021, his profit before taxation amounted to K604,640. This profit figure was arrived at after taking into account the following:

Note1: Investment income

This included royalties of K58,650 and dividends from a Lusaka Securities Exchange (LuSE) listed company of K20,200. The amount of investment income represents the actual cash received in each case. Withholding tax had already been deducted at source at the appropriate rates.

Note 2: Operating expenses

These included:

	K
Salaries & wages for employees	240,000
Masauso's salary	61,600
Entertaining suppliers	19,400
Gifts to customers of business branded wall clocks costing K180 each	1,800
Depreciation	106,000
Theft of money by an employee	10,000
Increase in general provision for bad debts	4,500
Loans to customers written off	13,100
Entertaining employees	22,200
Employee's Labour Day awards	15,920
Other allowable expenses	<u>130,180</u>
	<u>624,700</u>

Other information:

(1) Provisional income tax

Provisional income tax paid during the tax year 2021 amounted to K115,600.

(2) Implements, Plant and Machinery

At 1 January 2021, Masauso held office equipment with an income tax value of K85,000 which was acquired two (2) years ago at a cost of K170,000. There were no other assets qualifying for capital allowances on 1 January 2021.

(3) Importation of motor vehicles

On 1 March 2021 Masauso imported the following motor vehicles from Japan:

- (i) A second hand 2800cc Toyota Camry (Sedan) car at a cost of \$5,200 free on board. He paid insurance costs and transportation costs of \$1,700 and \$2,400 respectively up to the port of Dar es Salaam. Incidental costs incurred up to Nakonde border post amounted to \$600. Transportation costs incurred from Nakonde to Lusaka were K6,000, whilst motor vehicle registration costs in Lusaka amounted to K6,076. The Toyota Camry car was manufactured in April 2017.
- (ii) A second hand Mitsubishi Canter Truck, with a GVW of 3 tonnes, at a cost of \$8,700 free on board. He paid insurance costs and transportation costs of \$2,000 and \$2,300 respectively up to the port of Dar es Salaam. Incidental costs incurred up to Nakonde border post amounted to \$1,000. Transportation costs incurred from Nakonde to Lusaka were K7,000 whilst motor vehicle registration costs in Lusaka amounted to K7,270. The motor vehicle was manufactured in May 2013.

The exchange rate provided by the Bank of Zambia was K14.40 per US\$1 which was approved by the Commissioner General on the date of importation. On the same date the exchange rate quoted by a local Bureau de Change was K14.60 per US\$1.

Masauso used the Toyota Camry Car for both business and private purposes. It has been agreed with the Commissioner General that private use of the motor car averaged 20% during the tax year 2021. All other assets are used wholly and exclusively for business purposes.

Required:

- (a) Calculate the total amount of import taxes paid by Masauso on the importation of the Toyota Camry Car and the Mitsubishi Canter Truck. Your answer should include a computation of the cost qualifying for capital allowances for each vehicle.

(13 marks)
- (b) Calculate the amount of tax adjusted business profits for the year ended 31 December 2021.

(7½ marks)
- (c) Calculate the amount of income tax payable by Masauso for the tax year 2021.

(4½ marks)

[Total: 25 marks]

QUESTION THREE

(a) GSL Manufacturing Plc is a VAT registered Zambian manufacturing company which is listed on the LuSE. The directors of the company intend to buy manufacturing equipment on 1 January 2021 at a cost of K2,749,200 (VAT inclusive). The directors now wish to know the taxation implications of the following finance options they are considering to use to finance the acquisition:

- (i) Issue of bonds to raise the required finance at a coupon rate of 30% per annum incurring issue costs of K54,984. The proceeds from issue of the bonds will then be used to purchase the equipment outright. (4 marks)
- (ii) Purchase the equipment under a hire purchase agreement whose terms requires the company to pay an initial deposit of 40% of the cost of the asset to be followed by six monthly instalments of K412,380 payable monthly in arrears. (4 marks)
- (iii) Purchase the equipment under an operating lease. The terms of the lease are that the company will be required to pay annual lease rentals of K1,191,320 with the lease agreement being renewable at the end of each year. (3 marks)
- (iv) Finance the purchase using a five-year finance lease, whose terms requires the company to pay annual lease rentals of K1,129,000 in arrears, with implicit interest of 30% per annum. (3 marks)

Required:

Advise the directors of GSL Manufacturing Plc, using appropriate supporting calculations, of the income tax and value added tax implications of each of the above options.

(b) The following is a summarized Statement of Profit or Loss for RSB Bank Plc, for the year ended 31 December 2021:

	K'000
Interest income (Note 1)	309,600
Interest expense (Note 2)	<u>(183,900)</u>
Net interest income	125,700
Provision for loan losses (note 3)	<u>(16,500)</u>
Net interest income after provision for loan losses	109,200
Non- interest income (note 4)	<u>24,000</u>
Net interest and other income	133,200
Non-interest expenses (Note 5)	<u>(104,400)</u>
Income before taxes	28,800

Taxation (Note 6)	<u>(5,080)</u>
Income after tax	<u>23,720</u>

The following additional information is available:

(1) Interest income

The total withholding tax deducted at source at source from the interest income which is subjected to withholding tax was K4,388,000.

(2) Interest expense

This represents interest of K76,500,000 paid on customer deposits, interest of K106,740,000 paid to other banks and financial institutions and interest on a loan obtained to construct new central administration buildings of K660,000.

As at 31 December 2021, construction is still under way and it is anticipated that construction will be completed next year when the building is also expected to be commissioned and brought into use.

(3) Provision for loan losses

Provision for loan losses comprises an increase in general provision of loan losses amounting to K7,050,000, increase in specific provision of loan losses of K3,450,000, loan losses written off during the year of K4,500,000 and loan losses previously written-off recovered during the year amounting to K1,500,000.

(4) Non-interest income

This comprises dividend income amounting to K1,800,000 (gross), income from letting of property amounting to K5,600,000 (gross), fair value gains on investment property of K400,000, and fees from foreign exchange transactions of K16,200,000.

(5) Non-interest expenses

Non-interest expenses include depreciation charges of K870,000, employee's salaries of K80,760,000, entertainment expenditure for customers of K18,000, entertainment expenses for employees of K21,000, legal costs for recovery of loans of K470,000, donations of K150,000 to approved public benefit organisations and legal fees of K120,000 in connection with the acquisition of land. The balance comprises miscellaneous allowable general business expenses.

(6) **Taxation**

The figure for taxation in the statement of profit or loss above represents the provisional company income tax paid by the company in respect of the charge year 2021.

(7) **Implements plant and equipment**

There were no implements, plant and machinery qualifying for capital allowances at 1 January 2021, however, during the year, the company incurred the following expenditure:

	K
Installation of new Automated Teller Machines (ATMs)	1,500,000
Acquisition of office furniture	550,000
Expenditure on the construction of buildings for new branches	16,500,000

Required:

Calculate the company income tax payable by RSB Bank Plc for the tax year 2021.

(11 marks)

[Total: 25 Marks]

QUESTION FOUR

Mushili Plc has been in business for many years, preparing accounts annually to 31 December. The company has always been engaged in farming operations, but recently diversified its operations into manufacturing and retailing. The company is also planning to start exporting its products to other countries within the COMESA and SADC regional trade groupings.

For the tax year 2021, the company produced the following results from its operations:

	K
Profit from farming operations (Note 1)	3,860,000
Profit from manufacturing operations (Note 2)	34,300,000
Profit from retail operations (Note 3)	15,600,000

The following additional information has been made available:

Note 1: Profit from farming operations

The profit from the farming operations shown above, is the taxable profit before capital allowances.

Note 2: Profit from manufacturing operations

The figure of profit from manufacturing operations are the final taxable results after capital allowances.

Note 3: Profit from retail operations

The figure of profit from retail operations are the final taxable results after capital allowances.

Note 4: Implements, plant and machinery

At 1 January 2021, all implements, plant and machinery qualifying for capital allowances, were completely written down to zero. During the year ended 31 December 2021, the company incurred the following expenditure:

	K
Purchase of farm implements	640,000
Purchase of tractors	320,000
Expenditure on new irrigation system	150,000
Expenditure on development of orange plantation	400,000
Construction of five (5) dwelling houses for farm employees, costing K60,000 each	300,000
Construction of storage buildings for farm produce	360,000
Purchase of delivery van	200,000

Note 5: Provisional Income Tax

Provisional income tax paid in respect of the tax year 2021 was K16,883,000.

Note 6: Other information

In the tax year 2020, Mushili Plc produced a taxable profit of K1,400,000. This profit was much lower than the profits the company has been generating from farming operations in the recent past, due to a poor crop yield resulting from a prolonged drought experienced in that year's farming season. The directors of Mushili Plc now wish to make an election to average the taxable farming profits for the tax year 2020, with the final taxable farming profits for the tax year 2021.

Required:

- (a) Compute the taxable profit from farming operations after capital allowances for the tax year 2021. (8 marks)
- (b) Explain the circumstances under which income from farming may be averaged. (2 marks)
- (c) State, with explanations, the date by which the irrevocable election to average farming income can be made in the circumstances of Mushili Plc. (2 marks)
- (d) Assuming that Mushili Plc is successful in making the averaging election:
 - i) Compute the final taxable farming profits for each of the tax years 2020 and 2021.

(2 marks)

- ii) Prepare a computation of the final amount of the total company income tax payable by Mushili Plc for the tax year 2021. (6 marks)
- (e) Discuss five economic benefits to Zambia of being part of the COMESA and SADC regional trade groupings. (5 marks)

[Total: 25 Marks]

END OF PAPER

D3: BUSINESS TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

- (a) (i) A nominee, in relation to an individual being considered as an effective shareholder, is:
- (1) The spouse of the individual; or
 - (2) The child of the individual; or
 - (3) A person who holds shares in a company directly or indirectly on behalf of the individual; or
 - (4) A person who can be required to exercise, or a person who can require the exercise of voting powers in the affairs of a company in accordance with directions of the individual; unless the Commissioner-General determines that the spouse, child or other person is a person who can at all times exercise or require the exercise of voting powers in the affairs of the company otherwise than in accordance with the directions of the individual.
- (ii) A loan to an effective shareholder is:
- (1) The amount of money advanced
 - (2) The extent of credit facilities provided
 - (3) The difference between the cost of providing any benefit or advantage and the amount paid for such benefit or advantage when provided, whether such benefit is convertible into cash or not, or
 - (4) The difference between the open market value, as determined by the Commissioner General, of an asset transferred and the amount paid for that asset at the date of transfer, as the case may be, if an asset is transferred to an effective shareholder.

(b) (i) MODERN COPPER MINES (MCM) PLC
COMPUTATION OF ADJUSTED MINING PROFIT FOR THE TAX YEAR 2021

	K	K
Profit before tax		22,399,920
Add:		
Depreciation	1,620,450	
Amortisation	1,130,800	
Construction of community school	1,140,000	
Construction of mine road	650,000	
Entertaining customers	173,300	
Personal-to-holder cars:		
Range rover car	40,000	
Toyota Prado car	<u>40,000</u>	
		<u>4,794,550</u>
		27,194,470
Less:		
Profit on disposal	140,000	
Royalties	310,000	
Capital allowances (W1)	<u>685,000</u>	
		<u>(1,135,000)</u>
Adjusted mining profit		<u>26,059,470</u>

Workings

Capital allowances

	K
Drilling plant:	
Balancing charge: K125,000 – K460,000	(335,000)
Motor vans: 500,000 x 25%	125,000
Range Rover car: K710,000 x 20%	142,000
Toyota Prado car: K350,000 x 20%	70,000
Smelter equipment: K1,625,000 x 20%	325,000
Community school: K1,140,000 x 20%	228,000
Mine road: K650,000 x 20%	<u>130,000</u>
Total capital allowances	<u>685,000</u>

(ii) MODERN COPPER MINES (MCM) PLC
COMPANY INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K
Adjusted mining profit	26,059,470
Investment income	
Royalties	<u>310,000</u>
Total taxable income	<u>26,369,470</u>
Income tax	
Mining profits: K26,059,470 x 30%	7,817,841
Non-mining income: K310,000 x 35%	<u>108,500</u>
Income tax liability	7,926,341
Less:	
Provisional income tax paid	(1,780,640)

WHT-Royalties: K310,000 x 15%	<u>(46,500)</u>
Total tax payable	<u>6,099,201</u>

SOLUTION TWO

(a) Toyota Camry Car

	\$
Cost	5,200
Insurance costs	1,700
Transportation costs	2,400
Incidental costs	<u>600</u>
VDP in US\$	9,900
Exchange rate	<u>K14.40</u>
VDP in ZMW	<u>142,560</u>

	Value of the vehicle	Import taxes
	K	K
VDP for customs duty	142,560	
Customs duty	<u>18,049</u>	18,049
	160,609	
Excise duty	<u>23,463</u>	23,463
	184,072	
Import VAT @16%	<u>29,452</u>	29,452
	<u>213,524</u>	<u> </u>
Total import taxes		<u>70,964</u>

Cost qualifying for capital allowances: $K213,524 + K6,000 + K6,076 = K225,600$

Mitsubishi Canter Truck

	\$
Cost	8,700
Insurance costs	2,000
Transportation costs	2,300
Incidental costs	<u>1,000</u>
VDP in US\$	14,000
Exchange rate	<u>K14.40</u>
VDP in ZMW	<u>201,600</u>

	Value of the vehicle	Import taxes
	K	K
VDP for customs duty	201,600	
Customs duty	<u>13,156</u>	13,156
	214,756	
Excise duty	<u>5,701</u>	5,701
	220,457	
Import VAT @16%	35,273	35,273
Surtax	<u>2,000</u>	2,000
	<u>257,730</u>	_____
Total import taxes		<u>56,130</u>

Cost qualifying for capital allowances: K257,730 + K7,000 + K7,270 = K272,000

(b) MASAUSO

COMPUTATION OF TAX ADJUSTED BUSINESS PROFITS FOR THE TAX YEAR 2021

	K	K
Profit before tax		604,640
Add:		
Masauso's salary	61,600	
Entertaining suppliers	19,400	
Gifts to customers of branded wall clocks	1,800	
Depreciation	106,000	
Increase in general provision	4,500	
Loans to customers written off	<u>13,100</u>	
		<u>206,400</u>
		811,040
Less:		
Royalties	58,650	
Dividends	20,200	
Capital allowances (w)	<u>146,596</u>	
		<u>(225,446)</u>
Adjusted business profits		<u>585,594</u>

Workings

COMPUTATION OF CAPITAL ALLOWANCES

Office Equipment: K170,000 x 25%	42,500
Toyota Harrier Car: K225,600 x 20% x 80%	36,096
Mitsubishi Canter Truck: K272,000 x 25%	<u>68,000</u>
Total capital allowances	<u>146,596</u>

(c) MASAUSO

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K
Adjusted business profit	585,594
Add:	
Royalties: $K58,650 \times 100/85$	<u>69,000</u>
Total taxable income	<u>654,594</u>
Computation	
First K82,800	9,960
Balance: $K571,794 @37.5\%$	<u>214,423</u>
Income tax liability	224,383
Less:	
Provisional income tax	(115,600)
WHT- Royalties: $K69,000 \times 15\%$	<u>(10,350)</u>
Income tax payable	<u>98,433</u>

SOLUTION THREE

(a) Taxation implications of the financing options

(i) Issue of bonds

- (1) The input VAT incurred on the purchase of the equipment will be recoverable and this will amount to:
 $K2,749,200 \times 4/29 = K379,200.$
- (2) The bond issue costs of K54,984 will not be allowed when computing the taxable business profits of the company as the bonds will be for capital purposes.
- (3) The coupon rate on the bonds will not be an allowable expense when computing the taxable business profit of the company because the loan was used to finance the purchase of a non-current asset.

The disallowed interest will amount to:

$$(K2,749,200 + K54,984) \times 30\% = K841,255.$$

- (4) Capital allowances at the rate of 50% will be claimable on the VAT exclusive cost of the equipment and these will amount to:

$$(K2,749,200) \times 25/29 \times 50\% = K1,185,000.$$

(ii) Hire purchase

- (1) Hire purchase interest will be an allowable expense when computing the taxable business profits of the company.
- (2) The amount of the allowable interest will be:

Total amount paid	K
$(40\% \times K2,749,200) + (K412,380 \times 6)$	3,573,960
Less cost	<u>(2,749,200)</u>
Interest	<u>824,760</u>

- (3) Input VAT incurred on the cost of the equipment will be recoverable and this will amount to:

$$K2,749,200 \times 4/29 = K379,200.$$

- (4) Capital allowances at a rate of 50% will be claimable on the VAT exclusive cost of the equipment and these will amount to:
 $(K2,749,200) \times 25/29 \times 50\% = K1,185,000.$

(iii) Operating lease option

- (1) The company will be able to recover input VAT on the lease rental..
- (2) The VAT inclusive operating lease rentals will be allowable deductions when computing the taxable business profits.
- (3) The company will not be able to claim any capital allowances on the cost of the manufacturing equipment as these will be claimed by the lessor

(iv) Finance lease

- (1) Finance lease interest will be an allowable expense when computing the taxable business profits of the company.
- (2) Input VAT incurred on the cost of the equipment will be recoverable and this will amount to:

$$K2,749,200 \times 4/29 = K379,200.$$

- (3) Capital allowances at a rate of 50% will be claimable on the VAT exclusive cost of the equipment and these will amount to:

$$(K2,749,200) \times 25/29 \times 50\% = K1,185,000.$$

(b) RSB BANK PLC

COMPUTATION OF TAXABLE PROFIT

	K'000	K'000
Income before taxes		28,800
Add:		
Interest on capital loan	660	
Increase in general provision	7,050	
Depreciation	870	
Entertaining customers	18	
Legal fees for acquisition of land	<u>120</u>	
		<u>8,718</u>
Less:		37,518

Dividends	1,800	
Rental income	5,600	
Fair value gains	400	
Capital allowances on:		
- Commercial building (K16,500,000 x 2%)	330	
-Installation of ATMS (K1,500,000 x 25%)	375	
- Office furniture (K550,000 x 25%)	<u>137.5</u>	
		<u>(8,642.50)</u>
Taxable income		<u>28,875.50</u>

COMPUTATION OF TAXABLE BUSINESS PROFIT

	K
Company income tax (K28,875,500 × 35%)	10,116,250
Less:	
WHT on interest income	(4,388,000)
Provisional income tax	<u>(5,080,000)</u>
Income tax payable	<u>638,250</u>

SOLUTION FOUR

- (a) COMPUTATION OF TAXABLE PROFIT FROM FARMING AFTER CAPITAL ALLOWANCES FOR YEAR ENDED 31 DECEMBER 2021

	K	K
Taxable profit before capital allowances		3,860,000
<i>Less capital allowances:</i>		
Farm implements (K620,000 × 100%)	640,000	
Tractors (K320,000 × 100%)	320,000	
Irrigation system (K150,000 × 100%)	150,000	
Orange Plantation (K400,000 × 10%)	40,000	
Dwelling house (restricted to K20,000 × 5)	100,000	
Storage buildings (K360,000 × 100%)	360,000	
Delivery van (K200,000 × 25%)	<u>50,000</u>	
		<u>(1,660,000)</u>
Taxable profit after capital allowances		<u>2,200,000</u>

- (b) Income from farming or fishing may be averaged if:

- (1) It is for two consecutive tax years and it is such that one year's income is substantially greater than the income of the other year; or
- (2) One year has a loss while the other has a profit.

- (c) Mushili Plc should make the irrevocable election to average the income of the tax years 2020 and 2021 no later than 31 December 2022, which is the end of the tax year following the tax year 2021.

- (d) (i) The final taxable farming profit will be the average farming profits for the two tax year and these will amount to:

	K
Profit for 2020	1,400,000
Add profit for 2021	<u>2,200,000</u>
Total profit	<u>2,600,000</u>
Leverage profit taxable in each year	
K2,600,000 ÷ 2	<u>1,800,000</u>

- (ii) COMPUTATION

	K
Profits from manufacturing	34,300,000
Profits from retailing	15,600,000
Total non-farming income	49,900,000
Farming profits	<u>1,800,000</u>
Total taxable income	<u>51,700,000</u>
Company income tax on non-farming income	
35% × K49,900,000	17,645,000
Company income tax on farming income	
10% × K1,800,000	<u>18,000</u>

Company Income tax liability	17,483,000
Less tax already paid	
Provisional income tax	<u>(16,883,000)</u>
Final company income tax payable	<u>762,000</u>

- (e) The benefits of COMESA/SADC regional agreements to Zambia include:
- (1) Provides the country with a more secure access to major export markets and improvement of that access through the opportunity to negotiate elimination of lingering tariff peaks and other serious barriers in sectors where the region has a strong comparative advantage, e.g., agriculture.
 - (2) Given that regional agreements incorporate a spectrum of comparative advantage that reflects the world economy, they help to reduce the threats of trade and investment diversion which can be exceptionally costly for the Zambian economy.
 - (3) Regional agreements are an important magnet for attracting foreign direct investment, into Zambia from member states.
 - (4) They can serve as an anchor for structural reforms by adding credibility and locking-in policy commitments as well as directly and indirectly promoting institutional modernizations such as transparent dispute settlement, more efficient regulatory frameworks, business facilitation and effective customs procedures, etc.
 - (5) Regional agreements can also be the handmaiden of broader cooperation between Zambia and other countries of differing industrial capacities.

END OF SOLUTIONS



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D4: PERSONAL TAXATION

TUESDAY 15 JUNE 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	Any balance	37.5%

Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000	Any 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%
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Farming Allowances

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

Presumptive Taxes

Turnover Tax	4%
Presumptive Tax for Transporters	

Seating capacity	Tax per annum	Tax per day
	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 THE FOUR (4) QUESTIONS

QUESTION ONE

For the purposes of this question you should assume that today's date is 12 December 2020 and that the earnings ceiling for the purposes is K278,256.

Frank has run a trading business as a sole trader for many years, preparing financial statements to 31 December each year. His annual turnover has always exceeded K800,000. His business has grown and he, therefore, wishes to involve his wife Grace in running the business with effect from 1 January 2021. Grace will either be engaged as a partner and run the business as a partnership or be engaged as a shareholder and incorporate the business as a limited company. Frank has no assets on which capital allowances could be claimed on 1 January 2021.

Regardless of how Grace will be engaged in the business two, (2) motor cars with a cylinder capacity of 2900cc will be acquired at a cost of K120,000 each, office equipment at a cost of K70,000, Light truck at a cost of K115,000 and Fixtures and fittings at a cost of K50,000. The motor cars will be used by Frank and Grace for both business and private purposes. It is estimated that the business use in each car will be 60%. All the above assets will be acquired on 1 March 2021.

Partnership

If Grace is engaged in the business as a partner, she will be entitled to an annual salary of K280,000 and the business will also pay for her entertainment at a cost of K3,200 per month. Frank will continue drawing a monthly salary of K27,000. Frank and Grace will share profits and losses in the ratio 2:1 respectively.

The tax adjusted business profit for the tax year 2021 is expected to be K990,000. This profit is after all the necessary tax adjustments but before capital allowances and the remuneration package for both Frank and Grace. No NAPSA contributions will be payable under this option.

Limited company

If Grace is engaged as a shareholder, the business will be run as a Limited company under the name "FG Limited". Frank and Grace will hold 60% and 40% respectively of the issued equity share capital of FG Limited. Frank and Grace will be the only directors and employees of the company.

Frank and Grace will be entitled to annual directors' emoluments of K324,000 and K280,000 respectively. Grace will be entitled to entertainment allowance of K3,200 per month. Frank and Grace and Frank will be required to contribute 5% of their basic salary as employees' NAPSA contributions. FG Limited will also be required to contribute 5% of the basic salary of Frank and Grace as employer's NAPSA contributions.

The tax adjusted business profit for the tax year 2021 is expected to be K990,000. This profit is after all the necessary tax adjustments but before capital allowances and the remuneration package for both Frank and Grace.

Required:

- (a) Calculate the income tax payable by Frank and Grace for the tax year 2021 if Grace is engaged in the business as a partner. (9 marks)
- (b) Assuming that the business is incorporated, and Grace is engaged as a shareholder, calculate:
 - (i) The income tax payable by Frank and Grace for the tax year 2021. (4 marks)
 - (ii) The income tax payable by FG Limited for the tax year 2021. (8 marks)
- (c) Advise Frank and Grace whether the business should be run as a partnership or as a limited company. Your answer should be based on the amount of net income under each alternative. (4 marks)

[Total: 25 Marks]

QUESTION TWO

John Ncube was employed as a Plumber on a three-year renewable fixed term contract at Affordable Housing Initiative (AHI)Limited, a construction and property management company, engaged in the development, restructuring and management of residential houses for sale and letting. His contract of employment which commenced on 1 April 2018 and expired on 31 March 2021, provided for an annual salary of K132,000, annual transport allowance of 5% of his basic salary and annual housing allowance of 20% of his basic salary, paid monthly on the last day of each month. Pay As You Earn amounting to K12,319 was deducted from his employment income in the tax year 2021.

On 31 March 2021, the company paid his accrued leave pay of K5,500, repatriation pay of K22,000 and gratuity of 30%. He had always contributed 5% of his gross employment earning as NAPSA contribution. The earnings ceiling for the purposes of NAPSA contributions should be taken to be K278,256 per annum.

John decided not to renew his contract with AHI Ltd and on 1 April 2021, he commenced his business as a Self-employed Plumber, undertaking plumbing installations for newly built residential houses for a wide range of clients. He expects his annual revenue from this business to exceed K800,000.

He purchased plumbing equipment costing K25,000, office buildings at a cost of K120,000 and a motor car at a cost of K30,000 on 1 April 2021. It has been agreed with the commissioner General

that he will have private use of the motor car of 25%. John prepared the first accounts for the period ending 31 December 2021 and annually thereafter. His tax adjusted business profit from this new business for the period to 31 December 2021 was K300,000, before capital allowances.

AHI Ltd has not engaged someone to replace John from the time his employment contract with the company expired. However, on 1 May 2021, the company entered into an agreement with Ncube, to use his services as a self-employed contractor on its construction projects. Under this agreement, AHI Ltd assigns Ncube on which construction projects he should work on. The company provides him with transport to the construction sites and also provides all the equipment and material he needs for the performance of his duties in relation to the contract. Ncube is assisted by his own employees when performing his tasks and spends five hours from 08:00 to 13:00 every day from Monday to Friday (except for Saturdays and Sundays) working on construction projects assigned to him by AHI Limited, after which he is free to attend to his other clients. Ncube provides his own insurance cover, as well as, that of his assistants in case of any accidents occurring, whilst performing their duties on these projects. Ncube is required to cover the cost of any faulty plumbing works and compensate AHI Limited for any damage the company may suffer as a result of defective plumbing works or installations. Ncube invoices the company an agreed amount of K15,000 at the end of each month for the work performed. The amount of K15,000 per month has not been included in the estimated tax adjusted business profit before capital allowances figure of K300,000 given above.

Required:

- (a) Discuss the criteria the Zambia Revenue Authority will use to establish whether John Ncube is an employee or an independent self-employed contractor in relation to the agreement he entered into with AHI Ltd, on 1 May 2021, specifically describing:
 - (i) Those factors indicating that he is an employee of AHI Ltd. (5 marks)
 - (ii) Those factors indicating that he is an independent self-employed contractor. (6 marks)
- (b) Assuming that John Ncube is held to be self-employed in relation to the contract he entered into with AHI Ltd on 1 May 2021:
 - (i) Compute his final taxable business profit from his business in the tax year 2021. (6 marks)
 - (ii) Calculate his total final income tax payable for the tax year 2021. (8 marks)

[Total: 25 Marks]

QUESTION THREE

Jones and Mary Mulenga married in 1980 in Zambia. They had their first-born daughter Rebecca in 1982 and immediately left Zambia for employment in a country known as Kestonia in the same year, where Rebecca lived with her parents. The couple had one other child, Chanda who was born in Kestonia. During their period of stay in Kestonia, Jones Mulenga bought a house in Kestonia and also made various investments in companies that are resident in Kestonia. The currency of Kestonia is known as the Kestonian dollar (K\$).

Mr and Mrs Mulenga returned to Zambia in February 2021, together with their second born son Chanda, who is now employed by a Zambian company. The first-born child, Rebecca is married in Kestonia and has acquired Kestonian citizenship and does not intend to return to Zambia permanently.

On 1 March 2021, Jones took up employment as a Sales Agent with a Zambian resident company under the following conditions:

(1) He was entitled to the following payments:

Annual basic salary	K192,000
Lunch allowance per month	K1,500
Transport allowance per month	K4,500

(2) He was accommodated in a company owned house with a market value of K800,000. If the house had been let out, the company would have earned commercial rentals of K4,000 per month.

(3) The company paid for all the expenses relating to the house on his behalf and these included electricity bills of K300 per month, water bills of K200 per month and the wages for his housekeeper of K1,800 per month.

(4) On 1 May 2021, he was given a labour day award comprising cash amounting to K4,000.

(5) In December 2021, he received a bonus of 2% of his monthly basic salary for meeting his sales target for that month.

(6) Throughout his employment in the tax year 2021, he used his own personal Toyota Fortuner motor car, which he acquired on 1 March 2021 at a cost of K200,000 and has a cylinder capacity of 3,000cc for the purposes of the employment. He travelled a total of 30,000 kilometres in the motor car in the tax year 2021, out of which 21,000 kilometres were in the performance of the duties of her employment. He incurred motor car running expenses of K2,000 per month in respect of the motor car in the tax year 2021.

(7) He made the following payments from his employment income from Zambian sources:

Trade Union subscriptions	K200 per month
NAPSA contributions	K800 per month
Annual Golf club membership fee	K4,000
PAYE from Zambian employment income	K59,174

Other income

Jones Mulenga received the following investment income during the tax year 2021:

(1) Investments income from investments he holds in Zambia included:

Copyright Royalties	K21,250 (net)
Savings account interest	K3,000 (net)
Dividends from LUSE Listed Company	K18,000 (net)
Income from letting of property in Zambia	K43,200 (net)

(2) On 31 December 2021, the following investment income foreign sources was credited to his Zambian bank account in respect of the investments he holds in Kestonia.

Dividends from Kestonia companies	K\$1,300
Fixed deposit interest from Kestonian Banks	K\$935
Rental income from property let out in Kestonian	K\$22,500

The amount of the dividends was net of withholding tax at the rate of 35% deducted in Kestonia and the amount of the fixed deposit interest and rental income was net of withholding tax at the rate of 15% deducted in Kestonia.

There is no double taxation agreement between Zambia and Kestonia. When computing Zambian income tax payable, credit is available for any foreign tax paid in Kestonia. An exchange rate of K21.00 per P\$1 should be used where relevant.

Required:

- Explain the meaning of the term of domicile and describe how the domicile of an individual is determined. (3 marks)
- Advise Jones as to his domicile status as well as the domicile status of each of the members of his family. (4 marks)
- Calculate the income tax payable by Jones for the tax year 2021. (18 marks)

[Total: 25 Marks]

QUESTION FOUR

(a) Zambian companies may grant share options to its employees which give them the right, not the obligation, to buy shares in their employer companies. Tax benefits apply if the share option scheme is approved by the Commissioner General.

Required:

- (i) Explain the procedure to be followed to have the employee share option scheme approved by the Commissioner General. (3 marks)
- (ii) Explain six (6) conditions to be met for the share option scheme to be approved by the Commissioner General. (6 marks)
- (iii) Explain the tax benefits to the employer of administering an approved employee share option scheme. (3 marks)

(b) Esther Mvula is a Zambian resident individual aged 45 years and her health has deteriorated significantly. As a result she cannot work anymore to provide for the family and she is worried about how her children will survive if she was to die. Therefore, she is considering taking some form of financial protection product to protect her children against any adverse financial effect due to continued illness and/or death. She comes to you for advice.

(c)

Required:

Advise Esther of the nature and tax implications of each of the following financial protection products:

- (i) Whole of life assurance
- (ii) Term life assurance
- (iii) Critical illness insurance
- (iv) Permanent health care insurance

(8 marks)

(d) Turnover tax is the tax paid on turnover by all persons whose annual turnover is less than K800,000 and whose income is subjected to withholding tax where withholding tax is not the final tax.

Required:

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

[Total: 25 Marks]

END OF PAPER

D4: PERSONAL TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Partnership

Frank and Grace

Income tax payable for the tax year 2021

	K	K
Business profit		990,000
Less:		
Capital allowances:		
Motor cars: K120,000 x 2 x 20% x 60%	28,800	
Office equipment: K70,000 x 25%	17,500	
Light truck: K115,000 x 25%	28,750	
Fixtures: K50,000 x 25%	<u>12,500</u>	
		<u>(87,550)</u>
Adjusted business profit		<u>902,450</u>

	Total	Frank	Grace
	K	K	K
Salaries	604,000	324,000	280,000
Entertainment allowance	38,400		38,400
Balance 2:1	<u>260,050</u>	<u>173,367</u>	<u>86,683</u>
Total	<u>902,450</u>	<u>497,367</u>	<u>405,083</u>

Tax computation

First K82,800	9,960	9,960
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Balance K414,567/K322,283 @37.5%	<u>155,463</u>	<u>120,856</u>
Income tax payable	<u>165,423</u>	<u>130,456</u>

(b) Limited company

(i) Frank and Grace

Income tax payable for the tax year 2021

	K	K
Salary	324,000	280,000
Entertainment allowance (K3,200 x 12)		<u>38,400</u>
Taxable income	<u>324,000</u>	<u>318,400</u>

Computation

First K82,800	9,960	9,960
Balance K241,200/K235,600 @37.5%	<u>90,450</u>	<u>88,350</u>
Income tax payable	<u>100,410</u>	<u>98,310</u>

(ii) FG Limited

Income tax payable for the tax year 2021

	K	K
Business profit		990,000
Add:		
Personal to holder car benefit		
(K40,000 x 2)		<u>80,000</u>
		1,070,000

Less:

Directors emoluments

(K324,000 + K318,400) 642,400

Employers NAPSA contributions

(K278,256 x 5% x 2) 27,826

Capital allowances:

Motor cars (K120,000 x 2 x 20%) 48,000

Office equipment (K70,000 x 25%)	17,500	
Light truck (K115,000 x 25%)	28,750	
Fixtures (K50,000 x 25%)	<u>12,500</u>	
		<u>(776,976)</u>
Adjusted business profit		<u>293,024</u>
Income tax @35% x K293,024		<u>102,558</u>

(c) Net income

	Partnership	Limited company
	K	K
Business profit	990,000	990,000
Less:		
Income tax payable:		
Frank	(165,423)	(100,410)
Grace	(130,456)	(98,310)
Company		(102,558)
Employees' NAPSA contributions		(27,826)
Employers' NAPSA contributions _____		<u>(27,826)</u>
Net income	<u>694,121</u>	<u>633,070</u>

The business should be run as a partnership because the net income under this alternative is K61,051 (K694,121 – K633,070) higher than the net income under limited company.

SOLUTION TWO

- (a) When considering John Ncube's contract with AHI Ltd, the essential point to consider is whether the contract constitutes a contract of service in which case he will be deemed to be an employee of AHI Limited, or a contract for services in which case he will be deemed to be self-employed. This notwithstanding, no single test will be conclusive. Hence a multiple test approach must be used to make this determination.

(i) Factor's indicating employment

In the particular circumstances of the contract between John and AHI Ltd the following factors indicate that he is an employee of AHI Ltd in relation to the agreement entered into on 1 July 2021:

1. There appear to be a standing arrangement that John must provide the services to AH Ltd. This arrangement appears to be a long-term arrangement as the agreement does not indicate how long this arrangement will last.

Employees normally work under such long-term arrangements. The self-employed are hired to perform a specific task such that once the task has been completed, the arrangement comes to an end.

2. It appears that AHI Ltd has control over when and how much time John has to spend for working for the company, that is, every day from Monday to Friday, starting from 08;00 to 13:00. The company also assigns him to the construction projects where he should perform his duties.

This suggests that he is an employee of the company and as an employee he is controlled by the employer who will normally stipulate working conditions such as the working hours, the place at which duties are to be performed and other such conditions.

3. Although Ncube invoices AHI Ltd a fixed amount per month for working on the projects assigned to him by AHI Limited, it can be argued that the payment in fact, is in substance, a monthly salary.

Employees are paid in such a manner as they are paid an agreed salary on a monthly or weekly basis.

4. In the performance of his duties, Ncube uses the equipment and material provided by the AHI Ltd. The company also provides him with transport to the construction sites.

This indicates employment, as employees are normally provided with tools and equipment by their employer.

5. The fact that Ncube was recently employed by AHI Ltd may suggest that an agreement had been reached with the company to let him continue working for the company whilst also running his own business.

(ii) Factors that indicate that Ncube is self- employed status

1. Ncube does not exclusively work for AHI limited. He spends part of his time attending to other clients in his new business.
2. It further appears that Ncube is able to use other people or use his own employees to help him perform those duties and is not required to personally perform all the tasks assigned to him.
3. Ncube is paid an agreed contract price for work performed, even though this is paid monthly. Additionally, he is not entitled to any other benefits associated with employment such as leave pay, sick leave, pension rights or gratuity on expiry of the contract etc. It also seems he can suffer loss from the transaction in his own personal capacity.
4. Ncube will be required to provide his own insurance cover. If he was an employee, then of AHI Ltd, would have provided him with insurance cover for his actions.

It also appears that AHI Ltd will not be vicariously liable for the actions of Ncube in relation to the agreement as he will be required to compensate the company for any loss it suffers as result of any defective work.

5. John will also be required to cover the costs of any faulty work which John has to rectify in his own time and AHI Ltd will not pay any additional amounts in respect of such work.
6. There is no indication that the AHI Limited has the right to dismiss Ncube after giving him an appropriate period of notice.

(b) (i) COMPUTATION OF FINAL TAXABLE PROFITS

	K'000	K'000
Income from AHI Ltd (K15,000 x 8)		120,000
Taxable profit before capital allowances		<u>300,000</u>
Gross income		420,000
Less capital allowances on:		
Plumbing equipment (K25,000 x 25%)	6,250	
Office buildings (K120,000 x 2%)	2,400	
Motor car (K30,000 x 20%) x 75%	<u>4,500</u>	
		<u>(13,150)</u>
		<u>406,850</u>

(ii) JOHN NCUBE			
PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021		K'000	K'000
Business profits (W1)			406,850
<u>Employment income</u>			
Salary (K132,000 x 3/12)	33,000		
Transport allowance (K132,000 x 5%) x 3/12	1,650		
Housing allowance (K132,000 x 20%) x 3/12	6,600		
Accrued leave pay	<u>5,500</u>		
Taxable emoluments			<u>46,750</u>
Total income			<u>453,600</u>
<u>Income Tax</u>			
On first K48,000 x 0%			0
On next K9,600 x 25%			2,400
On next K25,200 x 30%			7,560
On excess (K453,600 – K82,800) x 37.5%			<u>139,050</u>
			149,010
Less PAYE			<u>(12,319)</u>
Income Tax payable			<u>136,691</u>

SOLUTION THREE

- (a) Domicile refers to an individual's permanent home. There are two types of domicile, domicile of origin and domicile of choice.

Therefore, an individual's domicile is determined by either establishing their domicile of origin or their domicile of choice.

- (1) The domicile of origin is the domicile which is acquired at birth, it is also dependent on the domicile of the parent. Therefore, an individual is held to be domiciled in the country in which they were born, or where their parents was born.
- (2) The domicile of choice is the domicile which is acquired by choice. When an individual reaches the age of 16, they can renounce their domicile of origin and choose the country they want to be their permanent home. It involves severing ties with the domicile of origin and having an intention to set up a permanent residence in another country.

- (b) Jones and Mary Mulenga are domiciled in Zambia by birth.

Chanda's domicile of origin is Kestonia where he was born, however he can renounce his Kestonian domicile should he wish to do so, given that he has taken up employment in Zambia.

Rebecca had a domicile of origin in Zambia where she was born. However, the fact that she does not intend to come back to Zambia permanently having taken up Kestonian citizenship, suggests that she has severed her ties with her domicile of origin and therefore has acquired Kestonian domicile as her domicile of choice.

- (c) JONES MULENGA

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K	K
<u>Zambian Employment Income</u>		
Salary (K192,000 x 10/12)		160,000
Lunch (K1,500 x 10)		15,000
Transport allowance (K4,500 x 10)		45,000
Electricity (K300 x 10)		3,000
Water bills (K200 x 10)		2,000
Housekeepers wages (K1,800 x 10)		18,000
Bonus (K192,000/12) x 2%		<u>320</u>
		243,320
Less allowable deductions:		
Capital allowances on motor car (K200,000 x 20%) 21,000/30,000	28,000	
Motoring expenses (K2,000 x 10) x 21,000/30,000	<u>14,000</u>	

			<u>(42,000)</u>
			201,320
<u>Zambian Investment income</u>			
Copyright royalties			
(K21,250 x 100/85)			<u>25,000</u>
			226,320
<u>Income from foreign sources</u>			
Dividends from Kestonia			
(\$1,300 x 100/65) x K21	42,000		
Fixed deposit interest from Kestonia			
(\$935 x 100/85) x K21	<u>23,100</u>		
			<u>65,100</u>
Income chargeable to income tax			<u>291,420</u>
<u>Income Tax</u>			
On first K48,000 x 0%			0
On next K9,600 x 25%			2,400
On next K25,200 x 30%			7,560
On excess (K291,420 – K82,800) x 37.5%			<u>78,233</u>
Zambian Income Tax charge			88,193
Less tax already paid			
PAYE			(59,174)
WHT on copyrights			
(K25,000 x 15%)			(3,750)
Less Double taxation Relief on:			
- Dividends from Kestonia (W3)	11,804		(W1)
- Fixed deposit interest from Kestonia	<u>3,465</u>		(W2)
			<u>(15,269)</u>
Final income tax payable			<u>10,000</u>

WORKINGS

(1) Total assessable income

	K
Income chargeable to income tax	291,420
Zambian rental income (K43,200x 100/90)	<u>48,000</u>
Total assessable income	<u>339,420</u>

(2) Total amount of Zambian tax charge

	K
Zambian Income Tax charge	88,193
Withholding tax on rental income (15% x K48,000)	<u>7,200</u>
Total Zambian tax charge	<u>95,393</u>

(3) Double taxation relief on the dividends from Kestonia:

This will be the lower of:

(i) The foreign tax paid on the dividends:

$$K42,000 \times 35\% = K14,700; \text{ and}$$

- (ii) The Zambian Tax Charge attributed to the dividends computed as:

$$\left(\frac{K42,000}{K339,420(W1)} \right) \times K95,393(W2)$$
$$= \underline{K11,804}$$

DTR will therefore be K11,804 being the lower amount.

- (4) Double taxation relief on the fixed deposit interest from foreign sources will be the lower of:

- (i) The foreign tax paid on the fixed deposit interest:

$$K23,100 \times 15\% = K3,465; \text{ and}$$

- (ii) The Zambian Tax Charge computed as:

$$\left(\frac{K23,100}{K339,420(W1)} \right) \times K95,393(W2)$$
$$= \underline{K6,492}$$

DTR will therefore be K3,465 being the lower amount.

SOLUTION FOUR

(a) Share options

- (i) The following is the procedure for the employee share option scheme to be approved by the Commissioner General:
 - (1) The employer should prepare the constitution and rules of the employee share option scheme, whilst referring the conditions of approval.
 - (2) The employer must make an application for approval to the Commissioner General. The application must be in writing and must be accompanied by the copies of the constitution and scheme rules.
 - (3) The Commissioner General reviews the constitution and scheme rules to determine whether all the conditions for approval have been satisfied.
 - (4) The Commissioner General would then grant the approval and communicate in writing that the scheme has been approved, stating the tax year from which the approval applies for the first time. Where the Commissioner General does not grant the approval, he still communicates to the applicant in writing and the employer may later re-apply.

- (ii) The following are the conditions to be met for the share option scheme to be approved:
 - (1) The scheme must be established in Zambia and the employer must be carrying on business wholly or partly in Zambia.
 - (2) The scheme should provide for the participation of all eligible employees (including directors).
 - (3) An employee participating in the scheme should not acquire more than one fifth (20%) of the shares to be issued under the scheme
 - (4) Only ordinary shares should be offered under the scheme
 - (5) The scheme entitles an employee to acquire a set number of shares at a fixed price
 - (6) The employee must be restricted to a set period of time to use an option to buy shares
 - (7) The employees must be citizens or permanent residents of Zambia regardless of where they perform their duties.

- (iii) The following are the tax benefits to the employer:
 - (1) The costs incurred in administering the share option scheme are treated as allowable expenses.
 - (2) The benefit derived from the shares under an approved share option scheme is exempt from tax
 - (3) No property transfer tax is charged on the transfer of the shares under an approved share option scheme.

(b) Financial protection products

(i) Whole of life assurance

This policy pays out the sum assured as a lump sum on the death of the life/lives assured to the grantee, who need not necessarily be the life assured or their beneficiaries, whenever death occurs. This policy may be written on a single or joint lives and on first death or last survivor basis.

There is no tax relief on the premiums and the policy proceeds are tax free if the policy is qualifying. The policy might be used on a last survivor basis to provide funds to meet the tax liability of the deceased's estate.

(ii) Term life assurance

This policy pays a lump sum death benefit where the life/lives assured die within the policy term. The policy may be written on decreasing sum assured basis and used to redeem a repayment mortgage or other loan which would otherwise be outstanding on the deceased's death.

If paid individually premiums receive no tax relief and the policy proceeds are not taxable. However, if the policy is taken by the employer to insure the life of a key employee, premiums are tax allowable and the policy benefit is taxable as a trading receipt.

(iii) Critical illness insurance

This policy provides a lump sum benefit, payable on the diagnosis of one from a list of life threatening conditions. Critical illness cover is sometimes referred to as dread disease cover. The seven core conditions are; cancer, coronary artery bypass surgery, heart attack, kidney failure, major organ transplant, multiple sclerosis and stroke.

When paid personally premiums receive no tax relief and the benefits received are not taxable. Where the employer insures the cost of their employee's salaries, the premium would be tax allowable but the policy proceeds would be taxable trading receipts.

(iv) Permanent health care insurance

This policy provides income replacement, payable in the event of the inability to perform own or suited or any occupation or activities of daily living following the expiration or a predetermined deferral period due to illness or disability.

When paid personally premiums receive no tax relief and benefits are not taxable. Where the employer insures the cost of his employees' salaries, the premium would be a tax allowable trading expense but the policy proceeds would be taxable trading receipts.

- (c) The following are some persons who are not required to pay turnover tax:
- (i) Any person whose annual turnover from business is more than K800,000.
 - (ii) Any person whose annual turnover is less than K800,000 but has voluntarily registered for VAT.
 - (iii) Any partnership business regardless of whether the annual turnover is more than K800,000.
 - (iv) Any person whose income constitutes income from partnership
 - (v) Any person carrying on mining operations in Zambia regardless of the level of the turnover.
 - (vi) Any person whose business is public transportation of persons for a reward.

END OF SOLUTIONS



Zambia Institute of Chartered Accountants

TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D5: INTERNATIONAL TAXATION

THURSDAY 17 JUNE 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

Turnover Tax	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

	Aged 2 years but below 5 years		Aged 5 years and over	
	Customs duty K	Excise duty K	Customs duty K	Excise duty K
Motor vehicles for the transport of ten or more persons, including the driver				
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 years but below 5 years		Aged 5 years and over	
	Customs duty K	Excise duty K	Customs duty K	Excise duty K
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars				
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642

Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc but not exceeding 2500 cc	22,561	29,329	18,049	23,463
SUVs				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463
	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 K	Excise duty K	Customs duty K	Excise duty 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, with spark ignition internal combustion piston engine	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, with spark ignition internal combustion piston engine	37,086	28,432	13,907	10,662

Surtax

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

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

- (a) International trade opens the door for countries to have production capabilities they may not have. As international transactions increase, demand and production also increases, hence, more money is made.

Required:

- (i) Explain what is meant by international trade and give its four (4) advantages. (5 marks)
- (ii) Explain the theory of Comparative advantage and its significance in relation to International trade. (5 marks)
- (b) Counter trade is the general term used to describe a variety of commercial arrangements for reciprocal international trade or barter between companies or other organisations. There are different counter trade arrangements which vary according to circumstances.

Required:

- (i) Explain six (6) types of counter trade as a means of exchanging goods or services which are paid for, in whole or in part, with other goods or services, rather than with money. (12 marks)
- (ii) Explain two (2) benefits and one (1) challenge of counter trade. (3 marks)

[Total: 25 Marks]

QUESTION TWO

- (a) The General Agreement on Tariffs and Trade (GATT) is a multilateral agreement whose objective is to liberalise trade by eliminating tariffs, subsidies, import quotas etc. From its foundation in 1947 until it was superseded by the World Trade Organisation (WTO), GATT's membership grew from 19 nations to more than 120 nations. The clarification and strengthening of GATT rules and the creation of the WTO hold out the promise of more effective policing and enforcement that benefit overall economic growth and development by promoting trade.

Required:

- (i) Explain the meaning of Border Tax Adjustments (BTAs) and the limitations of BTAs. (4 marks)
 - (ii) Explain the international origin and destination principles for indirect taxation. (4 marks)
- (b) Transfer pricing is the general term used to refer to the problem of allocating profits among the parts of the corporate group. The companies in the group may transfer goods and services to each other. The prices charged for these goods and services may simply serve as means of moving profits around the group and do not in a commercial sense make any profits for the group. All that matters are the after tax profits of the group.

Required:

- (i) Explain the main motives behind the practice of transfer pricing by multinational companies. (7 marks)
 - (ii) Explain the transfer pricing rules and regulations. (6 marks)
 - (iii) Explain any four (4) measures which a country can put in place to counter the negative effects of transfer pricing on tax revenue. (4 marks)
- [Total: 25 Marks]**

QUESTION THREE

- (a) There are several bilateral tax treaties that have been signed by countries to avoid double taxation of income. These treaties help to resolve tax problems confronting the international business.

Required:

- (i) Explain what is meant by Double Taxation Relief. (2 marks)
 - (ii) Describe three (3) methods of giving double taxation relief to Zambian residents receiving income from foreign sources. (6 marks)
 - (iii) Explain seven (7) roles and one (1) problem of Double Taxation Treaties. (8 marks)
- (b) John Musenge was employed by Wako Ltd as a Procurement Manager in 2021. The conditions of employment were as follows:

1. He was paid a monthly salary of K62,000 and contributed the appropriate amounts to NAPSA.
2. John Musenge 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 Wako Ltd for 2021 to John was K92,000.
4. He was required to pay subscription to Zambia Institute of Purchasing and Supply (ZIPS). In the year 2021, the subscription was K1,405.

John Musenge also had the following income from other sources during the charge year 2021:

- Salary K40,000 (gross), from part – time employment as a lecturer at Zambia Business College (ZBC). PAYE K29,400.
- Dividends from a company resident in the Republic of Malawi – K9,000 net (WHT rate 10%).
- Bank interest from a Zambian bank – K40, 000 (gross).
- Rent from his house in the Republic of Malawi – K36,200 net (WHT rate is 25%).
- Rent from his house in the Republic of Zambia – K54,000 gross (WHT rate is 10%).

Required:

Calculate the final income tax paid by John Musenge in the tax year 2021 assuming double taxation relief, where applicable, is granted by unilateral credit relief against Zambian income tax. (9 marks)

[Total: 25 Marks]

QUESTION FOUR

- (a) The intention of most lucrative and successful businesses is profit maximization which can be achieved by controlling operational costs and hence the tax liability

Required:

Explain what is meant by a tax haven and features of a tax haven. (9 marks)

- (b) Creative Entertainments Limited (CEL) is a Zambian resident company engaged in the provision of music and comedy functions within Zambia. CEL is subjected to the normal income tax. During the year ended 31 December 2021, the company held the following functions:

1. The company held a music show in Livingstone where it invited Jordan, a foreign artist, to perform at the function at an agreed fee of US\$17,620 (gross). The net profit after all the expenses, including the fee paid to the foreign artist, amounted to K370,000 from this event.

2. The company held a comedy show and invited Rosby a foreign comedian at an agreed fee of US\$10,400 (gross). The net after all expenses, including the fee paid to Rosby, from this event amounted to K180,700.

The only other income received the by the company during the tax year 2021 is a dividend amounting to K53,100 (net) received from a company resident in a country known as Republic of Bonia. The withholding tax was deducted in Bonia at a rate of 40%. The Bank of Zambia exchange rate averaged K14.40 per US\$1 throughout the tax year 2021.

CEL paid provisional income tax during the tax year 2021 amounting to K100,325

Required:

- (i) Explain the criteria used to determine whether an individual is resident in Zambia for income tax purposes. (3 marks)
- (ii) Explain the tax treatment of investment income earned from Zambia by non-residents. Your answer should include a computation of income tax on fees paid to Jordan and Rosby by CEL. (6 marks)
- (iii) Calculate the amount of income tax payable by CEL for the tax year 2021. Assume double taxation relief is given by unilateral credit relief. (7 marks)

[Total: 25 Marks]

END OF PAPER

D5: INTERNATIONAL TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

(a) International trade

- (i) International trade is the purchase of, sale or exchange of goods and services across national borders.

Advantages of International Trade:

1. Countries that have a surplus of resources to their needs can take advantage to export them and a country with a deficit of a raw material must either import or accept restrictions on its economic prosperity and standard of living.
2. International trade increases competition amongst suppliers in the world's markets.
3. International trade creates larger markets for a firm's output, and so some firms can benefit from economies of scale by engaging in export activities.
4. There may be political advantages to international trade because the development of links provides a foundation for closer political links.

(ii) Theory of Comparative Advantage

Under this theory, one country may not be able to produce the good more efficiently than any other country but can provide the good more efficiently than any other good within its own country.

This can happen if another country has absolute advantage in two different types of exports but it costs more monetarily or in labour than another country. This country then has comparative advantage because it is able to produce and export this second good to the first country cheaper and more efficiently.

When two countries produce the same two goods, and each has an absolute advantage in the production of one good, then it is easy to show that specialization will lead to an increase in their combined output.

The significance of the law of comparative advantage is that:

1. Countries should specialize in what they produce, even when they are less efficient, in absolute terms, in producing every type of good meaning that they should specialize in the goods where they have a comparative advantage
2. International trade should be allowed to take place without restriction on imports and exports, i.e there should be free trade.

(b) Counter trade

- (i) There are different types of counter trade arrangements but the most common forms are as follows:

Counter purchase

In this form of counter trade, the exporter undertakes to purchase goods or services from another country in order for him to secure an export order to that country. The overseas seller agrees to buy goods and services sourced from the buyer's country up to a defined amount. This results in two parallel and concurrent contracts which are nonetheless separate contracts.

Barter

This involves the direct exchange of goods and services having an equivalent value but with no cash settlement in a single sales contract.

Offset

Under this arrangement, the seller assists in marketing products manufactured by the buying country or allows part of the assembly of the exported product to be carried out by manufacturers in the buying country, and it is a common practice in the aerospace and defense industries.

An offset agreement involves the export of goods whereby the exporter agrees to incorporate into the final goods specified materials, components or sub-assemblies produced procured within the importing country.

Switch trading

This is where one company sells to another its obligations to make a purchase in a given country. Such transactions are known as switch or swap deals because they typically involve switching the documentation of goods.

Buyback (Compensation deals)

This occurs when a firm builds a plant in a country, or supplies technology, equipment, training, or other services to the country, and agrees to take a certain percentage of the plant's output as partial payment for the contract of building the plant.

Evidence accounts

Companies that conduct a large amount of continuing business in a country may be required to arrange counter purchases at least equal in value to their exports to the country. Since the company will be trading continuously with the company concerned, it would be impractical to arrange counter purchases for each individual import consignment into the country, and so the company may maintain an account by debiting its imports into the country and crediting the exports it has arranged”.

- (ii) The following are the benefits of counter trade
1. It facilitates conversion of foreign currency, which is a prime consideration for cash-strapped nations.
 2. Increased employment, higher sales, better capacity utilization and ease of entry into challenging markets.

The following are the challenges of counter trade:

1. Complex negotiations, potentially higher costs and logical issues.
2. The value proposition may be uncertain, especially in cases where the goods being exchanged have significant price volatility.

SOLUTION TWO

(a) General Agreement on Tariffs and Trade

- (i) Border Tax Adjustments (BTAs) are any fiscal measures that put into effect the destination principle in whole or in part.

In other words, BTAs relieve exported products of some or all of the tax the exporting country charged on similar domestic products in the home market and enables the importing country to charge some or all of the tax on imported products that it charges on similar domestic products.

The term "border tax adjustment" is somewhat confusing because it suggests that a fiscal measure is applied at the border, which is not always the case. Although in many cases imports are taxed on entry, certain countries apply a tax to imports after the goods have crossed the border and have been sold to other merchants or consumers. Moreover, the OECD has noted that certain tax systems do not tax exports at all and make no adjustment at the border.

Considering these varying tax systems, the OECD Working Party has recommended the replacement of the term "border tax adjustment" with "tax adjustment applied to goods entering into international trade."

- (ii) Origin principle states that internationally traded commodities are taxed at the rates prevailing in the country where goods are produced, and this is the country receiving the tax revenue.

Destination principle states that internationally traded commodities are taxed at the rates prevailing in the country where final consumption takes place, this being the country which obtains the tax revenue.

(b) Transfer pricing

- (i) Multinational companies practice transfer pricing in order to allocate profits to different parts of the group in a manner that is tax efficient.

There is no obstacle to charging any price for goods and services transferred from one member of the group to another foreign member of the group as this is the secondary consideration to tax consequences.

It is necessary to allocate profits among the companies in the group because under international tax norms a country will tax a non-resident only on the profits sourced in that country and tax a local subsidiary only on the profits sourced in that country and other worldwide income.

Multinational company usually arrange the affairs within the group in such a way that the subsidiary has only profits sourced in that country.

Transfer pricing is used as means of shifting profits from a country with a higher income tax rate to a country with a lower income tax rate in order to maximise the overall profits after tax.

Companies which have subsidiaries resident in countries with lower corporate tax rates may attempt to divert profits by inter-company pricing arrangements. This would result in reduced tax liabilities for the whole group and normally loss of significant tax revenue to the country.

In practice, however, the existence of subsidiaries of a Multinational Enterprise in different countries, and particularly different systems of taxation, can add another objective. It may be valuable to the company to set transfer prices to minimise overall group tax liabilities.

- (ii) Transfer pricing rules and regulations act as anti-avoidance tax rules meant to protect government's taxing rights and tax revenues.

Countries are enacting general provisions in their tax laws directed against tax avoidance, which give powers to reconstruct transactions. It seems to be increasingly accepted by the OECD that such rules are not in conflict with tax treaty obligations and can be applied to international transactions.

Generally, rules prevent a company to transfer goods from one country to another at a price that is lower than the market price of those goods.

In most countries, including Zambia, when transfer prices are lower than the actual market values of the goods being transferred, then the profit element must be added when calculating the taxable profits.

Similarly, when loan interest is charged at less than the commercial lending rate, the company receiving the said loan interest is deemed to have received interest at the commercial rate.

It is important, however, to note that the increase in the activities of corporate groups, the growing importance of unique intra group intangibles and services, and the sophistication of their financing operations mean that application of the arm's length standard is becoming more difficult, both conceptually and practically. The problems have been addressed in part by the OECD, which has expanded its guidance on this issue.

- (iii) The measures which can be used to counter the negative impact of transfer pricing include:
 1. Enacting laws which reflect international norms. The OECD standards represent internationally accepted norms. Countries must take these into account when enacting national laws.
 2. Advance Pricing Arrangement – this is a procedure whereby a company can agree in advance that its transfer pricing policy is acceptable to the tax authorities.

3. Networking with other tax authorities – developing relationships outside the traditional organization boundaries can also assist. It could be easy to obtain intelligence and expert information on tax matters.
4. Capacities building of the tax authorities – most tax authorities are poorly funded, and as such are therefore unable to embark on comprehensive capacity building strategies.

SOLUTION THREE

(a) Double Taxation Relief

- (i) Double Taxation Relief (DTR) is a relief that is given to eliminate the effects of double taxation in a case where income being charged to tax in a country has already been charged to tax in another country. If DTR was not available, taxable persons would bear too much tax on the same income as that income would then be subjected to tax in several countries.

- (ii) The three (3) methods of giving DTR to Zambian residents receiving income from foreign sources:

Treaty relief

This relief is applicable where there is a double taxation convention between two countries. The relief is given respectively according to the treaty which would provide for how the relief would be granted on inter country income.

The methods under which the relief would be available may be by way of exemption, where income subjected to tax in one contracting state would be exempt from tax in the other contracting state or by way of credit, or the tax already paid on the same income in one contracting state is given as a credit against tax payable on the same income in the other contracting state and so on.

Unilateral credit relief

This is a relief whereby double taxation is given unilaterally in one country because there is no treaty between the two countries. In such a case, DTR may be granted unilaterally in the country where the income is received by crediting against the tax charged in that country, the amount of foreign tax paid, if lower than the local tax payable. The amount treated as the double taxation relief is taken as the lower of the foreign tax paid and the local tax on the foreign income.

Unilateral expense relief

This is also available where there is no double taxation convention. In this case, DTR is given unilaterally in the country where the income is received by treating the foreign tax paid as an allowable expense. The relief is given by treating the amount of foreign tax paid as an allowable expense in the country in which the foreign income is received.

- (iii) The roles of Double Taxation Treaties are to:
 1. Protect against the risk of double taxation where the same income is taxed in two states. This could encourage both inward and outward investments. These can have a positive impact on the economy.
 2. Provide certainty of treatment for cross border trade and investment. Certainty can significantly reduce instances of bribery and corruption.

3. Prevent excessive foreign taxation and other forms of discrimination against business interests abroad. One of the canons of taxation is equity. All countries strive for quality tax regimes.
4. Protect the government's taxing rights and protect against attempts to avoid or evade tax. Tax evasion is a criminal offence in most countries. It denies countries the much needed funds for development.
5. Provide for the exchange of information between national taxation authorities. The tax authorities can use the information to capture more taxpayers and increase the tax revenues.
6. Seek to encourage and maintain an international consensus on cross-border economic activity and to promote international trade and investment. This is very important since the world is almost a global village.
7. Prevent firms being taxed twice on some remittances; once by the foreign government on a local subsidiary's payments to head office usually through withholding taxes on dividends, interest and royalties and then by the head office country as corporation tax on the revenues received.

Problem of Double Taxation Treaties

They provide opportunities for taxpayers to avoid domestic tax obligations and receive undue benefits under the treaty. This would be the case where someone acts through a company created in another country to obtain benefits that would not be available directly to the individual alone.

(b) John Musenge

Personal Income Tax computation for the charge year 2021

	K	K
Salary (62,000 x 12)		744,000
Housing allowance		92,000
Salary (Part-time)		40,000
Foreign dividends (9000 x 100/90)		<u>10,000</u>
		886,000
Less:		
ZIPS subscriptions		(1,405)
Taxable income		<u>884,595</u>
Income Tax		
First K48,000 x 0%		0
Next K9,600 x 25%		2,400
Next K25,200 x 30%		7,560
Balance K801,795 x 37.5%		<u>300,673</u>
		310,633
Less:		
Double Taxation Relief (DTR) (W1)		(1,000)
Tax already paid – PAYE		<u>(29,400)</u>
Final income tax payable		<u>280,233</u>

Workings

Double Taxation Relief (DTR)

Lower of:

(i) Foreign tax paid on dividend = K10,000 x 10% = K1,000

(ii) Zambian tax charge on foreign income =

Gross foreign dividend x Zambian tax charge
Total assessable income

10,000 x (310,633 + 5,400) = K3,367
(884,595 + 54,000)

Therefore, the DTR is K1,000, which is the lower amount.

SOLUTION FOUR

- (a) A tax haven refers to a country with lenient tax rules or relatively low tax rates which are often designed to attract foreign investment.

According to OECD report, tax havens have the following key features:

1. No or nominal taxes
No or only nominal taxes on relevant income usually on capital applied in that particular jurisdiction. This is the primary factor used in the identification of a tax haven but is not usually sufficient as a country may be competing fairly or adopting a preferential regime.
2. Lack of effective of exchange of information.
Tax havens typically have in place laws or administrative practices under which business and individuals can benefit from strict secrecy rules and other protections against scrutiny by tax authorities thereby preventing the effective exchange of information on taxpayers benefiting from the low tax jurisdiction.
3. Lack of transparency
There is lack of transparency in the operation of the legislative, legal or administrative provisions. The details of the regime and/ or its application are not apparent, or there is inadequate regulatory supervision or financial disclosure.
4. No substantial activities
This identifies a tax haven as a jurisdiction that facilitates the establishment of foreign owned entities without the need for a local substantive presence. However, this factor was recently dropped as it was pointed out that it is very difficult to define whether a country lacks substantial activities and thus only the "no or only nominal taxes" and the information factors remained as important to the identification of tax havens.

(b) Creative Entertainments Limited

- (i) An individual is regarded as a resident if he/she is physically present in Zambia for at least 183 days excluding the date of arrival and departure.
Individuals who normally live in Zambia are residents and ordinarily residents in Zambia.
An individual is also held to be a resident if he/she comes in Zambia with the intention of remaining in Zambia for more than 12 months or has the intention of establishing permanent residence in Zambia.
- (ii) Non-resident individuals are not liable to pay Zambian income tax. However, if the source of the income is within the Republic of Zambia, that income is taxable in Zambia.

The Zambian investment income earned by non-residents is subjected to Zambian income tax at source at a rate of 20% which is the final tax.

In the case of Jordan, CEL will be required to withhold 20% of the income payable to Jordan and remit that tax to ZRA.

The tax payable by Jordan will be:

$$\text{US\$17,620} \times \text{K14.40} \times 20\% = \text{K50,746.}$$

In the case of Rosby, withholding tax should be withheld at a rate of 20% on the income payable to Rosby.

The amount of tax payable on the Zambian income will be:

$$\text{US\$10,400} \times \text{K14.40} \times 20\% = \text{K29,952.}$$

(iii) CEL

Income tax payable for the tax year 2021

K

Zambian income

Profit from music show 370,000

Profit from comedy show 180,700

550,700

Foreign income

Dividends: $\text{K53,100} \times 100/60$ 88,500

Total taxable income 639,200

Income tax ($\text{K639,299} \times 35\%$) 223,720

Less:

Provisional income tax paid (100,325)

Income tax payable 92,420

Workings

Double Taxation Relief

Foreign tax paid: $\text{K88,500} \times 40\%$ = K35,400

Zambian tax: $\text{K88,500} \times 35\%$ = K30,975

The relief is K30,975 which is the lower.

END OF SOLUTIONS



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D6: TAX AUDIT AND INVESTIGATIONS

MONDAY 14 JUNE 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

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%
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Industrial Buildings:

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

Low Cost Housing (Cost up to K20,000)

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%
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Farming Allowances

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

Presumptive Taxes

Turnover Tax	4%
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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%
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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

Motor vehicles for the transport of ten or more persons, including the driver	Aged 2 years but below 5 years		Aged 5 years and over	
	Customs duty K	Excise duty K	Customs duty K	Excise duty K
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	Aged 2 years but below 5 years		Aged 5 years and over	
	Customs duty K	Excise duty K	Customs duty K	Excise duty K
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642

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

Station wagons

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

SUVs

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

Aged 2 years but below 5 years	Aged 5 years and over
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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, with spark ignition internal combustion piston engine	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, with spark ignition internal combustion piston engine	37,086	28,432	13,907	10,662

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

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 tonnes:**Customs Duty**

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

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
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3. Buses/coaches for the transport of more than ten persons**Customs Duty:**

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

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%

4. Trucks/lorries with gross weight exceeding 20 tonnes**Customs Duty:**

Percentage of Value for Duty Purposes	15%
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Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	0%
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All FOUR (4) questions are compulsory and MUST be attempted.

QUESTION ONE

The recent economic upheavals have seen most of the businesses experiencing low turnovers and low profitability and as such the liquidity headroom in the economy has been bad with some businesses defaulting on their payments such as taxes and other obligations.

Defaults on Tax remittances have not gone very well with the tax authorities. Measures such as tax amnesties have been introduced by the tax authorities so as to encourage the defaulting tax payers to meet their tax obligations. In order to increase the level of compliance, ZRA conducts tax audits and investigations to check the level of compliance by taxpayers although some taxpayers have no accounting records which increases the risks that the tax auditor may not be able to make the correct conclusion.

Required:

- (a) Explain what is meant by risk assessment and the components of tax audit risks. (6 marks)
- (b) Explain the nature of the sources of information an investigator may search for regarding hidden income by a taxpayer. (6 marks)
- (c) In relation to tax audits and investigations:
 - (i) Explain six (6) similarities between Tax Audits and Tax Investigations. (6 marks)
 - (ii) Explain five (5) differences between Tax Audits and Tax Investigations. (5 marks)
- (d) Explain what is meant by system based approach to tax investigation and tax audits. (2 marks)

[Total: 25 Marks]

QUESTION TWO

- (a) Zambia Revenue Authority has been vigorous in disseminating information to the general Public to encourage the tax payers to be compliant and as such the commissioner general has in certain instances introduced incentives to encourage tax payment defaulters to pay their tax obligations.

Required:

- Explain the six (6) circumstances which may cause ZRA to impose sanctions such as penalties and interest charges to penalize the tax payer. (6 marks)
- (b) ZRA uses various methods during an audit to ascertain whether there is an understatement in the income such as the indirect methods.

Required:

- (i) Explain the indirect methods that are used to verify taxable income. (11 marks)
- (ii) Explain any four (4) techniques that can be used by an auditor to examine books and records. (8 marks)

[Total: 25 Marks]

QUESTION THREE

- (a) Audit evidence is important to the tax auditor to enable him/her conduct an administrative tax audit. The evidence about tax payer's activities is analysed so that the tax auditor can answer questions and to develop audit findings, conclusions and make recommendations. The audit evidence collected must be both sufficient and adequate. In addition, it should be relevant and reliable to the tax auditor. However not every audit evidence is important. Only certain categories are expected to be used when coming up with opinion and recommendations.

Required:

- (i) Explain the categories of tax audit evidence. (3 marks)
- (ii) Explain the meaning of Relevant evidence, Reliable evidence, Sufficient evidence and Valid evidence. (8 marks)
- (iii) Explain the principles that contribute to quality tax audits in audit programmes already in place in accordance with the OECD administrations. (8 marks)
- (b) Explain the difference between an administrative assessment and a self-assessment in relation tax audit. (6 marks)

[Total: 25 Marks]

QUESTION FOUR

- (a) Metro Technologies Limited (MT Ltd.) has been operating as a telecommunications company for six years now. The company had been formed by members after receiving their terminal benefits. They had appointed a board of directors in order to provide an oversight on the operations of MT Ltd. Due to the recent expansion, the shareholders had proposed at the last Annual General Meeting (AGM) to list the company on the stock market in order to have more capital and increase its presence in all provinces. The capital structure should consist

of ordinary and preference shares and in certain cases, the company was allowed get a loan from its shareholders. During one of the tax inspections, the tax auditor suspected that there was under declaration of tax liabilities in the previous year and felt that a tax audit investigation was necessary in order to recover suspected underpayments of tax. The tax auditor is considering to either under take a risk based or systems based approach in order to ascertain the extent of tax that has been undeclared.

Required:

- (i) Explain why a Risk based approach could be preferred to a Systems based approach. (4 marks)
 - (ii) Explain four (4) methods by which a company can obtain a quotation on the stock market. (4 marks)
 - (iii) State four (4) factors to consider when implementing a standard method of analysing tax liabilities in the telecommunication sector. (4 marks)
- (b) You are a Tax Auditor dealing with the affairs of Katuba Mining Corporation for the tax year 2021.

Katuba Mining Corporation (KMC) is a Zambian resident mining company. The company is a 100% owned subsidiary of CCMD Plc a multinational company resident in a country known as The Republic of Mineralcity. KCM declared the income tax liability of K2,588,250 for the tax year 2021 all of which it paid.

The company's statement of profit or loss for the year ended 31 December 2021 showed a net profit as per accounts of K22,450,000. The profit figure is after charging operating expenses of K53,200,000. Operating expenses included depreciation of K12,760,000, mineral royalty tax of K13,600,000, donation to approved public benefit organization of K1,240,000, entertaining employees of

K2,900,000, entertaining loyal customers and suppliers K1,570,000. The balance of operating expenses is allowable for tax purposes.

During the year ended 31 December 2021, the company incurred the following capital expenditure qualifying for capital allowances:

	Original cost
	K
Delivery Trucks	20,000,000
Smelter Equipment	15,000,000

Mining Plant	22,000,000
Office Equipment	1,000,000
Three (3) Benz Motor cars (3200cc)	3,000,000
Community Hospital	5,000,000
Community School	2,600,000

The Benz motor cars are used on personal-to-holder basis by three (3) directors. The private use in each car has been agreed with the Commissioner General to be 60%. All the assets were acquired from Zambian suppliers in Zambian Kwacha.

During the year ended 31 December 2020, the company incurred a tax adjusted loss of US\$1,850,000.

The following average mid-rate exchange rates have been provided by the Commissioner General:

	ZMW per US\$1
2020	14.20
2021	14.65

Any losses and capital allowances may be indexed using the formula:

$(1 + \frac{R2 - R1}{R1}) \times \text{loss/capital allowance}$

R1

Required:

Calculate the amount of income tax underpaid by Katuba Mining Corporation for the tax year 2021. (13 marks)

[Total: 25 Marks]

END OF PAPER

D6: TAX AUDIT AND INVESTIGATION SUGGESTED SOLUTIONS

SOLUTION ONE

- (a) Risk assessment is a stage in the audit planning process where the auditor determines the likelihood of recording an inappropriate opinion on an audit as a result of a misstatement in the financial documents examined.

Audit risk assessment is part of the series of controls which are used to manage integrity of an audit, and to determine when and how audits should be conducted, and by whom.

If the audit risk is high, it may indicate that audits should be performed more frequently to increase the chance that errors and misstatements will be caught.

Audit risk has the following components:

1. Likelihood that material misstatement will be made in the financial document;
2. Misstatement will not be caught by internal controls;
3. Misstatement will not be caught by the auditor/investigator.

These components are assigned numerical scores for decision making in audit process (e.g. More frequent audits for high risk to improve detection probability, or change factor to lower.

- (b) The investigator can pursue specific information from many sources regarding hidden income. These sources include:

- (i) Tax Returns already submitted (Income Tax, Value Added Tax and Property Transfer Tax);
- (ii) Saving accounts and money market funds
- (iii) Bank Accounts & Money Market Funds, Cancelled Cheques, ATM transactions;
- (iv) Lifestyle Analysis, Offshore Accounts;
- (v) Cash flow procedures in a business;
- (vi) Credit cards receipts for purchases;
- (vii) Loan applications & personal net worth statements at banks/CRB.

- (c) Tax Audits and Tax Investigations.

- (i) The following are the similarities
 1. They both help in enhancing tax compliance.
 2. They both test checks using accounting and auditing procedures.
 3. They both use tax law guidance.
 4. They both provide time for the tax payer to explain the situation.
 5. They both allow the tax payer to be represented
 6. They both consider the tax payer's opinion where necessary.

(ii) Differences between tax audit and tax investigations:

1. Tax audits normally covers current year of assessment while tax investigation may extend to previous tax years.
2. Tax audits are conducted by random sample of examination while tax investigation is an in-depth examination.
3. Tax audits are conducted without any tax evasion case while tax investigation is normally conducted when there is suspicion of tax evasion or tax fraud.
4. Tax audits outcome is normally a civil case while a tax investigation case is a criminal offence.
5. Tax audits are routine checks of the level of taxpayers' compliance while tax investigations are normally triggered by suspicion of tax fraud.

(d) System based approach is used mainly used for medium and large businesses and is based on the assumption that such businesses have internal control systems which will constitute a reliable base for the preparation of the record and books for the taxpayer.

SOLUTION TWO

- (a) The following are the possible reasons why sanctions can be imposed by ZRA on a tax payer for non-compliance to the tax rules:
1. Understatements of liability resulting from unintended errors, ignorance or misrepresentation of facts and /or law.
 2. Understatements of liability resulting from careless or reckless acts.
 3. Understatements of liability resulting from deliberate and /fraudulent acts.
 4. Failure to keep adequate records and books.
 5. The failure to supply requested information relevant to the conduct of audit inquiries.
 6. Tax evasion offences, which can result in prosecution under criminal law and in most cases, can lead to terms of imprisonment and/or fines.

(b)

(i) The following are the methods:

1. Source and application of funds method (also known as the T- account method).
This method involves reconstructing income to determine the actual tax liability and is an analysis of a tax payer's cash flows and comparison of all known expenditures with receipts for the period.

Net increases and decreases in assets and liabilities are taken into account along with non-deductible expenditures and non-taxable income over the sum of reported and unreported taxable income.

It is suitable when the expenditure appears out of proportion to the income reported.

2. Bank deposit and cash expenditure method

Under this method, we compute income by analysing what happened to a tax payer's funds. It is based on the theory that if a tax payer received money, only two things can happen, it can either be deposited or spent.

This is based on the assumption that the proof of the deposit into the bank, after certain adjustments have been made for non-taxable receipts, constitutes evidence of taxable receipts. This method can be used in the examination of income tax returns.

3. Mark-up method-

This method is based on the use of ratios or percentages considered typical for the business under examinations, in order to make the actual determination of the tax liability.

It consists of the application of appropriate percentage of mark-up to arrive at the tax payer's gross receipts. This method can overcome the weaknesses of the bank deposit/cash expenditure methods and others, which do not effectively reconstruct income when cash is not deposited and the total cash outlays cannot be determined unless volunteered by the tax payer.

The method is recommended when inventory is the principal income producing factor and the tax payer has non-existent or unreliable records.

4. Unit and volume method.

In many instances, gross receipts may be determined or verified by applying the sales price to the volume of the business done by the tax payer. The number of units or volume of business done by the tax payer might be determined from the tax payer's books or records.

The records under examinations may be adequate regarding cost of sales and expenses. In some cases, information may be obtained from third parties.

5. Net worth method

This method is based on the theory that increases in tax payer's net worth during a tax year, adjusted for non- deductible income may result from taxable income.

The method requires that the reconstruction of the tax payer's financial history, since all assets and liabilities need to be accounted for during the relevant period.

(ii) The following are the techniques to examine books and records:

1. Analytical review

An analytical review of financial statements and returns as filed is often completed during the preliminary stage of the audit.

Ratios such as gross profit margin and inventory turnover ratios are used to test the accuracy of a tax payer's reported sales, cost of sales or ending inventory, unusual variances are noted and addressed during the interview with the taxpayer and additional audit procedures developed where necessary.

2. Investigative approach

Auditors are encouraged to use an investigative approach in their audits. Such approach uses information obtained from the taxpayer or from other sources; it requires judgement, imagination and using information outside the accounting records to perform the audit.

3. Record examination

The main approaches to detect false accounting include the examination of books and documents conducted at the taxpayer's business or branches, counterpart examination and examination of savings and deposit accounts.

4. Third party information

Where warranted, information can be obtained during the course of an audit from third parties to verify the tax payer's income.

SOLUTION THREE

(a) Tax audits and evidence

(i) The following are the three categories of tax audit evidence:

1. Physical evidence -this a type of evidence that is obtained by directly observing people, buildings and events etc.
2. Technical evidence /oral evidence -it is type of evidence that a tax auditor obtains through enquiries, interviews and questionnaires.
3. Documentary evidence-the client maintains its transactions on files in form of financial reports that are prepared from the accounting system. Others are research papers records and statistical data.

(ii) Relevant evidence

This is the evidence that bears clear and logical relationship to audit objectives, audit questions and assessment criteria. An important aspect of relevance is that, if the audit objective is an ongoing activity, the evidence that is used to reach conclusion should not be outdated as well.

A Tax payer should only use historical evidence only when the current evidence becomes irreverent.

Reliable evidence

This is the evidence that will lead to consistent findings if the same study is carried out repeatedly in the same environment by different auditors who are using the same methods and same data.

However, it is important that the audit evidence should be clearly described and be accepted.

Sufficient evidence

This is the quality of the audit evidence that is needed to support an audit finding. The decision as to whether the audit evidence is sufficient in quality will be influenced by its quality.

Enough audit evidence should be gathered in order to persuade a reasonable person that their findings, conclusions and recommendations are well informed.

Valid evidence

This is evidence that describes what it is intended to describe. The concept of validity is important when findings are based on analytical evidence.

(iii) The following are the key principles:

1. Accurate- It identifies non-compliance, entail a correct interpretation of the law, and lead to a correct assessment of tax liability.

2. Efficiency- Tax audits minimise the compliance burdens on the taxpayer and minimise the use of the tax authority's resources in terms of the outcome delivered.
3. Objective- All decisions made are based on the facts.
4. Transparent- When issues are developed and documented in the working papers, these developments are discussed with the tax payer during the course of the tax audit.
5. Fair- Technically accurate and procedurally correct in accordance with domestic laws and policies.
6. Complete- The audit has a defined start and end point and the taxpayer knows when the audit process is complete.
7. Defensible- The decisions made in the audit and the actual audit process can stand up to external scrutiny.
8. Consistent- The same taxpayer circumstances should produce the same result regardless of which tax auditor undertakes the audit.

(b) Administrative assessments mainly involve the Zambia Revenue Authority (ZRA) making a technical assessment on the affairs of the tax payer.

Normally administrative assessments are standardized and are set by the Organisation for Economic Corporation (OECD).

However, each country can adopt a flexible mode of conducting an administrative assessment and this does not involve the tax payer but officials from ZRA. They will try to work out how much taxes the tax payer was expected to pay.

A self-assessment is done by the tax payer. A tax payer will calculate the tax liability based on income made and then makes an estimation of tax and submit a return which they later submit to ZRA for scrutiny.

The tax return under self-assessment may contain errors and omissions that may need to be corrected at a later stage.

In this case the tax authority makes a revised assessment showing the correction of errors and advises the taxpayer of the revised tax liability.

SOLUTION FOUR

(a) Metro Technologies Limited

- (i) A risk based approach refers to the development of auditing techniques which are responsive to risk factors in a tax payer's business environment.

The auditor applies judgment to determine what level of risk pertains to different areas of a client's system and devices appropriate audit tests.

This approach should ensure that greatest audit time is directed at the riskiest areas, so that the chance of detected errors is improved and time is not spent on unnecessary testing of safe areas.

Since MT Ltd runs a telecommunication company which might have risks in determining the correct amount of taxable income such as income on roaming services, measurement of discounts to airtime dealers and subscribers.

- (ii) The four methods by which a unquoted company can obtain a quotation on the stock market are:

1. An offer for sale-this is a means of selling the shares of a company to the public.it may sell issue shares and then sell them on stock exchange in order to raise for the company.
2. A prospector's issue
3. A placing
4. An introduction.

- (iii) The following are the factors to consider when implementing a standard method of analysing tax liabilities in the telecommunication sector:

1. the distributional consequences.
2. their cost of collection, which includes the degree of avoidance and evasion to which they are subjected or.
3. Whether it is at least partially assimilated by the purchaser.
4. The degree to which the tax distorts the pattern on consumption, and for this reason imposes an additional cost on the economy (sometimes known as the excess burden)

(b) **Katuba Mining Corporation**
Income tax payable for the tax year 2021

	K	K
Net profit as per accounts		22,450,000
Add:		
Depreciation	12,760,000	
Mineral royalty tax	13,600,000	
Entertainment of customers	1,570,000	
Personal to holder cars: K40,000 x 3	<u>120,000</u>	
		<u>28,050,000</u>
		50,500,000
Less:		
Capital allowances (w1)		<u>(14,770,000)</u>
Adjusted business profits		35,730,000
Less:		
Loss relief brought forward (w2)		<u>(17,865,000)</u>
Taxable profits		<u><u>17,865,000</u></u>
Income tax @30%		5,359,500
Income tax liability declared by KMC		<u>(2,588,250)</u>
Income tax underpaid by KMC		<u><u>2,771,250</u></u>

Workings:

1. Capital allowances for the tax year 2021	
Delivery Trucks: K20,000,000 x 25%	5,000,000
Smelter Equipment: K15,000,000 x 20%	3,000,000
Mining Plant: K22,000,000 x 20%	4,400,000
Office Equipment: K1,000,000 x 25%	250,000

Benz motor cars: K3,000,000 x 20%	600,000
Community Hospital: K5,000,000 x 20%	1,000,000
Community School: K2,600,000 x 20%	<u>520,000</u>
Total capital allowances	<u>14,770,000</u>

2. Loss relief

Loss brought forward: \$1,850,000 x K14.20 = K26,270,000

Indexed Loss

$(1 + (\text{K}14.65 - \text{K}14.20)) \times \text{K}26,270,000$

K14.20

=K27,102,500

Since the indexed loss is more than 50% of the taxable mining profits, only a loss equivalent to 50% of the taxable profits will be relieved. i.e K35,730,000 x 50% = K17,865,000. The balance of the loss amounting to K9,237,500 will be carried forward to the tax year 2022.

END OF SOLUTIONS