



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D1: BUSINESS INFORMATION MANAGEMENT

WEDNESDAY 14 JUNE 2017

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.
2. This question paper consists of **FOUR (4)** questions of Twenty Five (25) marks each. You must attempt all the **FOUR (4)** questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **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.

Attempt all four (4) questions

QUESTION ONE

Some organisations are globally dispersed. Executives from different locations need to meet and discuss critical issues.

To save on expenses such as travel, accommodation, allowances etc. it has been agreed that such meetings can be held via video conferencing.

Required:

- (a) Explain the term *video conferencing* and state the equipment that must be in place in order to conduct a video conference. (8 marks)
- (b) Distinguish the terms *Quality Assurance* and *Quality Control*. (4 marks)
- (c) Briefly explain what SWOT analysis is used for. (2 marks)
- (d) Using a business such as Microsoft, apply the SWOT model, listing ONE (1) issue under each heading. (8 marks)
- (e) Give **THREE (3)** advantages of Expert systems (3 marks)

[Total: 25 Marks]

QUESTION TWO

Two experienced team members have just resigned from the project. The remaining members are required to take on the work of these two members.

Required:

- (a) List **THREE (3)** actions that the project manager could take to improve the morale of his team. (6 marks)
- (b) Discuss **FOUR (4)** functions of a project manager. (8 marks)

- (c) Explain the circumstances that would favour each of the following ways of obtaining a new system:
- (i) Custom development (5 marks)
 - (ii) Outsourcing (5 marks)
- (d) State the importance of Critical Success Factors (CSF) in project management.
- (1 mark)

[Total: 25 Marks]

QUESTION THREE

- (a) Interviews are one of the fact finding techniques that can be used to find out systems requirements by systems analysts.
- (i) Distinguish between *structured* and *unstructured* interviews. (2 marks)
 - (ii) Give **two (2)** advantages of open ended questions and **two (2)** disadvantages of closed ended questions during interviews (8 marks)
- (b) A restaurant is considering creating a website so that they can start doing business online.
- (i) Explain the role of World Wide Web in the field of e-commerce (4 marks)
 - (ii) Give **three (3)** reasons why a restaurant would consider using it. (6 marks)
 - (iii) Describe five technology and business trends that have enhanced the role of information systems in today's competitive business environment (5 marks)

[Total: 25 Marks]

QUESTION FOUR

- (a) Write brief notes on the following technologies
- (i) Electronic Data Interchange (EDI). (4 marks)
 - (ii) Electronic Funds Transfer (EFT). (4 marks)
 - (iii) Telemarketing. (4 marks)
 - (iv) Document encryption. (4 marks)
- (b) Identify **four (4)** roles of knowledge management systems in the enterprise? (4 marks)
- (c) What organizational processes are supported by knowledge management applications? (4 marks)
- (d) When creating an Information System, businesses need an Information System Strategy. Explain what you understand by the term *Information System*. (1 mark)

[Total: 25 Marks]

END OF PAPER

JUNE 2017- BUSINESS INFORMATION MANAGEMENT (D1)

SOLUTIONS

SOLUTION ONE

- a) Video Conferencing is the ability to hold a conference or meeting where participants are in different location but are to see each other as though they are in the same location or room, using the internet

The equipment that must be in place in order to hold a video conference include:

- The computer with internet connection
 - Digital camera for taking video of the participants
 - Speakers for providing audio sound
 - Microphone for capturing the participants' audio sounds/speech
- b) Quality assurance is part of quality management focused on providing confidence that quality requirements will be fulfilled. Quality assurance comprises administrative and procedural activities implemented in a quality system so that requirements and goals for a product, service or activity will be fulfilled. It is a process-driven approach that facilitates and defines goals regarding product design, development and production.
- Quality Control is an aspect of the quality assurance process that consists of activities employed in detection and measurement to ensure that the product or service has met standards set. It involves systematic measurement, comparison with a standard, monitoring of processes and an associated feedback loop that confers error prevention.
- c) A SWOT analysis can be a useful way of summarizing the relationship between environmental influences and core competencies and hence framing the agenda for developing new strategies. It can be simply understood as the examination of an organization's or a strategy's internal Strengths and Weaknesses, and its external Opportunities and Threats.
- d) **Applying the SWOT model on a business such as Microsoft**
- **S** – brand, size, experience, funds
 - **W** – countless amendments to software, figurehead still Gates, unsure in new platforms

- **O** – more platforms
- **T** – open source software, fast developments

e) **Expert Systems**

Expert systems are the computer applications developed to solve complex problems in a particular domain, at the level of human intelligence and expertise. They capture the knowledge of experts in a limited domain.

Advantages

- They work steadily without getting motional, tensed or fatigued.
- Provide answers for decisions, processes and tasks that are repetitive
- Combine various human expert intelligences
- Capture expertise before it is lost
- Reduce dependence upon one expert
- Reduce / eliminate error and inconsistency
- Allow non-experts to reach scientifically supportable conclusions
- Knowledge sharing

SOLUTION TWO

- a) Two experienced team members have just resigned from the project and the following are the possible solutions the project manager could take to improve the morale of his team.

Possible solutions are:

- Organising an outside team event
- Motivate the team in improving the remuneration package
- Individual meetings with staff, perhaps to discuss or develop motivational issues and emphasise new prospects now arising from this project
- Recruiting more staff to replace those who have been taken off
- Perhaps agreeing a project bonus, or special overtime payments

- b) The **FOUR** functions of a project manager include:

- Planning
- Controlling
- Coordinating

- Monitoring
- Reviewing
- Motivating staff
- Resourcing

c) **Explanations for circumstances which would favour each of the following ways of obtaining a new system:**

i) **Custom development**

The custom development strategy is appropriate when several conditions are met. First and foremost, there should be a unique business need which is unable to be fulfilled by a purchased, pre-written solution. Second, there should be functional, technical, and project management skills available in-house, and there should be a desire to build and enhance these skills. The organization should have a proven track record of development, and should have an established systems development methodology. Finally, the project timeframe should be flexible enough to accommodate the uncertainty of a custom development project.

ii) **Outsourcing**

Outsourcing is a good design strategy when the organization does not have the experience or resources itself to do the development in-house, or when it wishes to focus its own resources on other more strategic efforts, and wishes to let an outsourcer handle a less strategic project. It is not a good idea to outsource projects of high strategic value to the organization because the organization does not enhance its own capabilities if the work is outsourced. A very capable project manager is needed to help ensure the success of an outsourcing arrangement.

d) **Critical Success Factors (CSF)**, also known as Key Result Area (KRA), are a limited number of key variables or conditions that have a tremendous impact on how successfully and effectively an organization meets its mission or the strategic goals or objectives of a program or project. Businesses must perform the activities associated with critical success factors at the highest possible level in order to achieve their intended objectives and achieve competitive advantage.

SOLUTION THREE

a) Fact finding techniques -interviews

- i) **Structured interviews** are fixed format interviews in which all questions are prepared beforehand and are put in the same order to each interviewee. Although this style lacks the free-flow of a friendly conversation, it provides the precision and reliability required in certain situations.

Unstructured interviews are much more casual and unrehearsed

During an unstructured interview, the interviewer lets the conversation flow freely and asks such questions which make the interviewee think and analyse a particular situation.

- ii) **Open-ended questions**

These are questions in which the respondent is allowed to give long answers.

Advantages:

- The interviewee can freely express themselves.
- More information can be solicited from the interviewee.
- They will give you opinions and feelings of the interviewee.

Closed questions

These require the respondent to give one word or short phrase answers. While the interviewer can get quick responses it has a number of disadvantages:

- The interviewee cannot give their own opinion of things
- they force respondents to give simplistic responses to complex issues

b) The role of World Wide Web in the field of e-commerce.

- (i) The World Wide Web on the Internet represented a turning point in e-commerce by providing an easy-to-use technological solution to the problems of information publishing and dissemination. The web made e-commerce a cheaper way of doing business and enabled more diverse business activities. Use of the Internet and web-site is to allow vendors and service providers to do business on-line. The Internet supports e-commerce and it also requires an infrastructure which allows customers to visit virtual shopping malls for items on sale. Ecommerce requires a secure way to transfer the money electronically. Internet promotes e-

selling in fraction of seconds. Thus, it promotes the growth of a customer base. It promotes interactive surveys. The users' opinions can be gathered anywhere as it provides real time statistics to the users.

- (ii) A restaurant would use the e-commerce for any of the following reasons:
 - Allow casual visitors to book a meal/pizza/etc. before they arrive there.
 - Allows the restaurant to advertise to catch potential customers.
 - By using an attachment show potential customers how to get to the restaurant
- (iii)
 - Internet growth and technology convergence
 - Transformation of the business enterprise
 - Globalization
 - Rise of the information economy
 - Emergence of the digital firm

SOLUTION FOUR

a)

(i) **Electronic Data Interchange (EDI)**

Business operations involve extensive use of information processing and communication technology between clients and the business, between ports and exporters/importers. More specifically Electronic Data Interchange (EDI) enables organisations to exchange documents and transactions between computer to computer, this reduces the cost of paperwork, reduces the time for collecting/receiving essential information. EDI can be used extensively between various networks; internet, intranet and extranet.

(ii) **Electronic Funds Transfer (EFT)**

Organizations can benefit from this technology by enabling its clients and freight activities to transfer money electronically between different bank accounts; interbank transactions are done globally through EFT. This reduces delays and paperwork; it also eliminates errors and can handle large volumes of financial transaction in business without physical handling of cash.

(iii) Telemarketing

This is also known as telesales, it enable clients to conduct marketing activities electronically amongst themselves using telecommunication devices. This increases productivity of customers and reduces paperwork in the conduct of business. Adverts can be done electronically, choices of goods can be made quickly and payments can be done electronically.

(iv) Document encryption

To avoid illegal access to data and other documents such as e-mail on the network, before sending these can be encrypted, or scrambled so that any illegal access will not succeed because the text has been transformed into unreadable form. At the receiving end the text can then be decrypted or transformed back to an original text by a legal recipient, this avoids any kind of theft.

b) Four roles of knowledge management systems in the enterprise.

Roles of Knowledge Management Systems are:

- Collects relevant knowledge and makes it available wherever and whenever it is needed.
- Support business processes and management decisions
- link the firm to external sources of knowledge
- Support processes for acquiring, storing, distributing, and applying knowledge.

c) Organizational processes are supported by knowledge management applications.

Organizational process that are supported by KM applications are:

- Acquiring knowledge
- Storing knowledge
- Distributing knowledge
- Apply knowledge

d) Information System is the software that helps you organise and analyse data.

Or

An information system is any organised system for the collection, organisation, storage and communication of information.

END OF SOLUTIONS



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D2: FINANCIAL MANAGMENT

FRIDAY 16 JUNE 2017

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

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8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. Formulae, Present Value, and Annuity tables are provided at the end of this question paper.

Attempt all FOUR (4) questions.

QUESTION ONE

BBM Ltd has incurred expenditure of K5 million over the past three years researching and developing a product. The business has decided to manufacture the product itself instead of giving another company. This would be a new departure, since the business has so far concentrated on research and development projects. However, the business has manufacturing space available that it currently rents to another business for K100,000 a year. The business would have to purchase plant and equipment costing K20 million and invest K6 million in working capital immediately for production to begin. A market research report, for which the business paid K50, 000, indicates that the new product has an expected life of five years. Sales of the product during this period are predicted as follows:

Year	1	2	3	4	5
Number of units ('000)	800	1,400	1,800	1,200	500

The selling price per unit will be K30 in the first year but will fall to K22 in the following three years. In the final year of the product's life, the selling price will fall to K20. Variable production costs are predicted to be K14 a unit, and fixed production costs (including depreciation) will be K4.4 million a year. Marketing costs will be K2 million a year. The business intends to depreciate the plant and equipment using the straight-line method and based on an estimated residual value at the end of the five years of K2 million. The business has a cost of capital of 10% and pays tax at the rate of 25% a year.

Required:

- (a) Calculate the net present value (NPV) of the project and advise whether the project is acceptable. (18 marks)
- (b) Calculate the internal rate of return (IRR) for the project and advise whether the project is acceptable. (7 marks)

[Total: 25 Marks]

QUESTION TWO

- (a) Overtrading refers to a situation where a company is over reliant on short term finance to support its operations.

Required:

- (i) Explain the danger of overtrading to a firm. (2 marks)
 - (ii) Describe any **four (4)** indicators of overtrading in a firm. (6 marks)
- (b) Describe any **three (3)** financial targets that a firm may set giving at least one example of each. (6 marks)

- (c) Mulumba Ltd is a manufacturing company seeking to improve its working capital management. The following information was prepared by the finance department for the year ended 31 December 2016:

	K'000
Average inventory	150
Average trade receivables	1,000
Average trade payables	480
Credit sales	10,000
Credit purchases	8,000
Closing inventory	100

Required:

- (i) Calculate the working capital cycle in terms of months. (8 marks)
- (ii) State any **three (3)** ways of reducing the length of the company's working capital cycle. (3 marks)

[Total: 25 Marks]

QUESTION THREE

- (a) The following data relates to the ordinary shares of Marka Plc:

Current market price, 31 December 2016	K15
Dividend per share, 2016	K1.5
Annual expected growth rate in dividends and earnings	10%
Average markets return	15%
Risk-free rate of return	6%
Beta factor of Marka Plc. equity shares	1.6

Required:

- (i) Calculate the cost of equity using the dividend growth model. (4 marks)
 - (ii) Calculate the cost of equity using the capital asset pricing model. (4 marks)
 - (iii) Explain **four (4)** limitations of dividend growth model and **three (3)** advantages of capital asset pricing model. (7 marks)
- (b) Marka Plc has in issue 15% bonds of a nominal value of K1, 000. The market price is K850 ex -interest.

Required:

Calculate the cost of this capital if the bond is:

- (i) Irredeemable. (3 marks)

- (ii) Redeemable at par after 7 years. (7 marks)

Ignore taxation in (i) and (ii) above.

[Total: 25 Marks]

QUESTION FOUR

Lonrho Plc a Zambian company in the financial services industry is considering a bid for Trimble Ltd another Zambian company in the same industry.

The following financial information relates to Trimble Ltd:

Investment in 9% redeemable debentures	K1, 000,000
Ordinary share capital (K10 par value)	K800, 000
Average annual profits after taxation	K200, 000
Proposed dividend pay-out ratio	40%
Annual dividend pay-out ratio 4 years ago	30%
Equity beta	1.8

The debenture interest is payable semi-annually and the debentures have 5 years remaining to maturity. The debentures have a par value of K1,000 each. The average market risk premium is 6% and the average sector price earnings ratio is 12.

Investors in the debentures require a return of 10%. The risk free rate of return is 4% and the average sector price earnings ratio is 15. The debentures will be redeemable at par on maturity date.

Required:

- (a) Estimate the likely value of Trimble Ltd using the following methods:
- (i) Present value of future cash flows assuming cash flows are generated from debentures. (5 marks)
 - (ii) Price earnings ratio method. (3 marks)
 - (iii) Dividend growth model. (7 marks)
- (b) Assuming the bid was successful describe the conditions which should be satisfied for Trimble Ltd to be considered as either an "associate" or a "subsidiary" of Lonrho Plc. (10 marks)

[Total: 25 marks]

END OF PAPER

Formula Sheet

Economic order quantity

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

Miller – Orr Model

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

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

The Capital Asset Pricing Model

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

The asset beta formula

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

The Growth Model

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

Gordon's growth approximation

$$g = b r_e$$

The weighted average cost of capital

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

The Fisher formula

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

Purchasing power parity and interest rate parity

$$s_1 = s_0 \times \frac{(1+h_e)}{(1+h_b)} \qquad f_0 = s_0 \times \frac{(1+i_e)}{(1+i_b)}$$

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

JUNE 2017-FINANCIAL MANAGEMENT (D2)

SOLUTIONS

SOLUTION ONE

a)

Net present value computation

Year	0	1	2	3	4	5
Selling price	-	30	22	22	22	20
Variable costs per unit	-	14	14	14	14	14
Contribution per unit		16	8	8	8	6
No. of units ('000)	- 800	1,400	1,800	1,200	500	
Contribution(K'000)	- 12,800	11,200	14,400	9,600	3,000	
Fixed costs (K'000)	- (800)	(800)	(800)	(800)	(800)	
Marketing costs (K'000)	- (2,000)	(2,000)	(2,000)	(2,000)	(2,000)	
Cash flow before tax (K'000)	10,000	8,400	11,600	6,800	200	
Tax@25%	(2,500)	(2,100)	(2,900)	(1,700)	(50)	
Initial outlay (K'000)	(20,000)	-	-	-	-	2,000
Rent foregone (K'000)	- (100)	(100)	(100)	(100)	(100)	
Working capital	(6,000)	-	-	-	-	6,000
Net cash flow(K'000)	(26,000)	7,400	6,200	8,600	5,000	8,050
Discount@10%	1.000	0.909	0.826	0.751	0.683	0.621
Present Values(K'000)	(26,000)	6,727	5,121	6,459	3,415	4,999

NPV(K'000) 720

The project is financially acceptable because it gives a positive Net present value

Workings:

Depreciation (K'000) 3,600.00 $\ast(20,000 - 2,000)/5$
 Fixed cost (K'000) 4,400-3,600 = 800

b) IRR Computation

Year	0	1	2	3	4	5
Net cash flow(K'000)	(26,000)	7,400	6,200	8,600	5,000	8,050
Discount@20%	1	0.87	0.756	0.658	0.572	0.497
Present Values(K'000)	(26,000)	6,438	4,687	5,659	2,860	4,001

NPV(K'000) (2,355)

IRR= $10\% + (720/720+2355) \times (20\%-10\%) = 12.3\%$

The project is financially acceptable because gives an IRR of 12.3% which is higher than the cost of capital.

SOLUTION TWO

- a) (i) Overtrading is risky because short-term finance may be withdrawn relatively quickly if accounts payable lose confidence in the business, or if there is a general tightening of credit in the economy and this may result in a liquidity crisis and even bankruptcy even though the firm is profitable.
- b) Symptoms of overtrading are as follows:
 - i) There is a rapid increase in turnover.
 - ii) There is a rapid increase in the volume of current assets and possibly also non-current assets. Inventory turnover and accounts receivable turnover might slow down, in which case the rate of increase in inventories and accounts receivables would be even greater than the rate of increase in sales.
 - iii) There is only a small increase in proprietor's capital. Most of the increase in assets is financed by credit especially the trade payables and bank overdraft. The trade payables payment period is expected to lengthen and the bank overdraft limit may be reached or even exceeded.

- iv) Some debt and liquidity ratios change dramatically. Liquidity ratios will fall leading to a liquidity deficit. In addition, gearing will rise such that the proportion of total assets financed by capital falls and the proportion financed by credit rises.
- c) FINANCIAL TARGETS
 - i) To increase profits e.g. the company may want to increase profits by 50% next year from the current K10000 to K15000 next year.
 - ii) To minimize the level of gearing e.g. to ensure that the debt/equity ratio does not exceed 100%.
 - iii) To improve dividend per share e.g. from K5/share to K8/share.
- d) i) working capital cycle

Receivables collection period = $(\text{trade receivables} / \text{credit sales}) \times 12$
 $K1,000 / K10,000 = 1.2 \text{ months}$

Trade payables payment period = $(\text{trade payables} / \text{credit purchases}) \times 12$
 $(K480 / K8,000) \times 12 = 0.72 \text{ months}$

Inventory turnover period = $(\text{average inventory} / \text{cost of sales}) \times 12$
 $(\text{Opening stock} + \text{closing stock}) / 2 = \text{average inventory}$
 $(\text{Opening stock} + K100) / 2 = K150$
 Therefore opening stock = K200

Cost of sales = opening stock + purchases – closing stock
 $= K200 + K8000 - K100$
 $= K8100$

Inventory turnover period = $(K150 / K8100) \times 12 = 0.22 \text{ months}$
 Working capital cycle = $1.2 - 0.72 + 0.22 = 0.7 \text{ months}$
- (iii) WAYS TO REDUCE THE LENGTH OF THE WORKING CAPITAL CYCLE
 - i) Improving on the collection of money from receivables by negotiating a shorter payment period than the current 1.2 months.
 - ii) Negotiating longer credit period with supplier's, the current payment period can be increased to 1.5 months. However, delaying payments to suppliers beyond the time allowed may affect the company's future relationship with suppliers.
 - iii) Improving on the current inventory turnover period of 0.22 months. The company can use certain inventory management models to avoid overstocking.

SOLUTION THREE

a)

i) Cost of equity = $\frac{D_0}{P_0} (1+g) + g$

$$P_0 = K1.5(1+0.1)/15 + 0.1 = 21\%$$

ii) Cost of equity = $R_f + \beta(R_m - R_f)$

$$= 6\% + 1.6 (15\% - 6\%) = 20.4\%$$

iii)

The dividend growth model has the following limitations:

- ❖ The model does not explicitly incorporate risk.
- ❖ It assumes that dividend will grow smoothly which is not the case in reality and therefore g is only an approximation.
- ❖ The model fails to take capital gains into account, however it is argued that a change of share ownership does not affect the present value of the dividend stream.
- ❖ No allowance is made for the effects of taxation although the model can be modified to incorporate tax.
- ❖ It assumes there are no issue costs for new shares.

The advantages of capital asset pricing model include the following:

- ❖ It considers only systematic risk, reflecting a reality in which most investors have diversified portfolios from which unsystematic risk has been essentially eliminated.
- ❖ It generates a theoretically-derived relationship between required return and systematic risk which has been subject to frequent empirical research and testing.
- ❖ It is generally seen as a much better method of calculating the cost of equity than the dividend growth model in that it explicitly takes into account a company's level of systematic risk relative to the stock market as a whole.

b)

i) Cost of irredeemable debt = Interest/ MV debt

$$= 150/850 = 17.65\%$$

ii)

Year		Cash flow	Discount@15%	PV	Discounts@	PV
0	MV	(850)	1.000	(850)	1.000	(850)
1-7	Interest	150	4.160	624	3.605	540.75
7	Redemption	1000	0.376	<u>376</u>	0.279	<u>279</u>

NPV

150(30.25)

Using the IRR formula, the cost of redeemable debt is:

$$15\% + \frac{150}{150+30.25} (20\% - 15\%) = 19.2\%$$

SOLUTION FOUR

a)

i) Present value of future cash flows method

PERIOD		CASH FLOWS	D.F (5%)	PV
1-10	interest	45	7.722	347.49
10	9% /2 (4.5%x K1, 000)			
10	redemption	1000	0.614	614
Market value				961.49
Total market value K961.49 x 1000=K961, 490				

ii) Price earnings ratio method of valuation

Market value = P/E ratio method x E.P.S

12XK2.5

K30/Share

Number of shares 80000

Market value K30/share x 80000shares =K2400000.

iii) Dividend growth model

$P_0 = D_0 (1+g) / (k_e - g)$

Earnings per share = K200000/80000 shares =K2.5/share

$D_0 = 40\% \times K2.5 = K1$

$D_0 (1+g)^n = D_n$

Dividend four years ago = 30% x K2.5 = K0.75

$K0.75 (1+g)^4 = K1$

$[(1/0.75)^{0.25}] - 1 = g$

$g = 7.5\%$

$K_e = R_F + B (R_m - R_F)$

$4\% + 1.8 \times 6\%$

14.8%

$P_0 = [K1 (1+0.075)] / 0.148 - 0.075$

$P_0 = 1 \times 1.075 / 0.073$

$= K14.726/\text{share}$

Value of Trimble $K14.726 \times 80000 = K1178,080$

- b) A subsidiary is an entity that is controlled by another entity known as the parent. Control is usually established based on ownership of more than 50% of the voting power of the subsidiary.

However there are other situations in which control can exist. This is when Lonrho has power:

- i) To govern the financial and operating policies of Trimble under a statute or an agreement.
- ii) To appoint or remove the majority of the members of the board of directors.
- iii) Over more than half of the voting rights by virtue of agreement with other investors.
- iv) To cast the majority of votes at a meeting of the board of directors.

An associate is an entity over which the investors have significant influence and that is neither a subsidiary nor an interest in a joint venture.

Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

Lonrho plc can be assumed to have significant influence over Trimble Ltd if it owns between 20% to 50% of the shares of Trimble Ltd.

END OF SOLUTIONS



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D3: BUSINESS TAXATION

WEDNESDAY 14 JUNE 2017

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.
2. This question paper consists of **FOUR (4)** questions of Twenty Five (25) marks each. You must attempt all the **FOUR (4)** questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **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.

Taxation Table

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

Income from farming for individuals

K1 to K39,600	first K39,600	0%
Over K39,600		10%

Company Income Tax rates

On income from manufacturing and others	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US\$4,500	4% of norm value
From US\$4,500 to less than US\$6,000	5% of norm value
From US\$6,000 and above	6% of norm value

Mineral Royalty on other minerals

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

Capital Allowances

Implements, plant and machinery and commercial vehicles:

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

Non- commercial vehicles

Wear and Tear Allowance	20%
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Industrial Buildings:

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

Low Cost Housing (Cost up to K20,000)

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%
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Farming Allowances

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

Presumptive Taxes

Turnover Tax

Monthly turnover

K1 to K4,200

K4,200.01 to K8,300

K8,300.01 to K12,500

K12,500.01 to K16,500

K16,500.01 to K20,800

Above K20,800

Turnover Tax per month

3% of monthly turnover above K3,000

K225 per month+3% of monthly turnover above K4,200

K400 per month+3% of monthly turnover above K8,300

K575 per month+3% of monthly turnover above K12,500

K800 per month+3% of monthly turnover above K16,500

K1,025 per month+3% monthly of turnover above K20,800

Annual turnover

K1 to K50,400

K50,400.01 to K99,600

K99,600.01 to K150,000

K150,000.01 to K198,000

K198,000.01 to K249,600

Above K249,600

Turnover Tax per annum

3% of annual turnover above K36,000

K2,700 per annum+3% of annual turnover above K50,400

K4,800 per annum +3% of annual turnover above K99,600

K6,900 per annum+3% of annual turnover above K150,000

K9,600 per annum+3% of annual turnover above K198,000

K12,300 per annum +3% of annual of turnover above K249,600

Presumptive Tax for Transporters

Seating capacity	Tax per annum	Tax per day
	K	K
From 64 passengers and over	7,200	19.70
From 50 to 63 passengers	6,000	16.40
From 36 to 49 passengers	4,800	13.00
From 22 to 35 passengers	3,600	10.00
From 18 to 21 passengers	2,400	6.60
From 12 to 17 passengers	1,200	3.30
Less than 12 passengers and taxis	600	1.60

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%

Value Added Tax

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

Customs and Excise

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%
--	-----
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%
--	----
5. **Surtax**

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

K2,000

Attempt all the FOUR (4) questions

QUESTION ONE

For the purposes of this question, you should assume that today's date is 31 March 2017.

Tembani commenced to trade on 1 January 2017. All his sales are standard-rated for Value Added Tax (VAT) purposes. His sales, excluding VAT, for the first three months up to 31 March 2017 and his forecast up to 31 December 2017 are as follows:

January (Actual)	K55,000
February (Actual)	K70,500
March (Actual)	K72,000
April (Forecast)	K85,000
May (Forecast)	K89,000
June (Forecast)	K95,200
July (Forecast)	K96,800
August (Forecast)	K97,000
September (Forecast)	K90,000
October (Forecast)	K108,600
November (Forecast)	K110,200
December (Forecast)	K101,000

Tembani purchased a motor car and a motor van on 1 January 2017 at a cost of K60,800 (VAT inclusive) and K81,200 (VAT inclusive) respectively. On 1 March 2017, Tembani incurred expenditure on standard rated services valued at K29,000 (VAT inclusive). Tembani buys goods from VAT registered suppliers, and for the first half of the year purchases are expected to be K23,200 (VAT inclusive) per month. The price of goods is expected to increase from K23,200 to K26,680 (VAT inclusive) per month with effect from 1 July 2017 due to inflation. Petrol and diesel expenses for the first three months of 2017 totaled K6,496 (VAT inclusive) and K9,860 (VAT inclusive).

Required:

- (a) Describe the types of persons who are required to register for Value Added Tax (VAT) purposes in Zambia. (2 marks)

- (b) Explain when Tembani will be required by law to register for Value added tax, and the consequences of registering for VAT late (Ignore the quarterly threshold). (8 marks)
- (c) Assuming that Tembani registered for value added tax voluntarily on 1 January 2017, calculate the VAT payable for the first quarter ended 31 March 2017. (8 marks)
- (d) Define Reverse VAT and explain the circumstances under which Reverse VAT is charged. (7 marks)
- [Total: 25 marks]**

QUESTION TWO

Frank Kabwili commenced business in 2008. Since then, he has always prepared accounts to 31 March every year. For the financial year ended 31 March 2017, he made a tax adjusted profit, before capital allowances of K380,000. He then decided to change the accounting date from 31 March to 31 December each year. Frank prepared financial statements for nine (9) months to 31 December 2017 reporting a tax adjusted profit before capital allowances of K301,500. Frank owns the following implements, plant and machinery in the business:

<u>Asset</u>	<u>Date of Purchase</u>	<u>Cost</u>
Toyota Pajero car	5 February 2015	K160,000
Equipment	28 December 2015	K40,000
Fuso truck	1 February 2017	K165,000
Computers	30 April 2017	K30,000

It has been agreed with the Commissioner General that Frank has 25% private usage in the Toyota Pajero car. All other assets are used wholly and exclusively for business purposes.

Required:

- (a) Explain what is meant by basis of assessment clearly explaining the meaning of current year and preceding year basis. (3 marks)
- (b) Explain the basis of assessment for the year ended 31 March 2017 and nine (9) months ended 31 December 2017. (2 marks)
- (c) Calculate the final adjusted business profits for the tax year 2016 and 2017. (12 marks)
- (d) Calculate the income tax payable by Frank Kabwili for the charge year 2017. (4 marks)
- (e) Explain any three (3) persons who are required to pay provisional income tax, and the due date for the submission of the provisional income tax return for the tax year 2017.

(4 marks)
[Total: 25 Marks]

QUESTION THREE

- (a) Mutobo Bank Plc is a Zambian bank, which was incorporated 10 years ago. Since then, the bank has grown significantly with 20 branches in different parts of the country. The company listed its shares on the Lusaka Stock Exchange (LuSE) in 2015.

The bank made net income before tax of K23,400,200. This figure of K23,400,200 was arrived at after accounting for the following:

1. Investment income comprising of royalties of K400,000 (gross), rental income of K100,000 (gross), and dividends from Zambian companies of K80,000 (gross). Withholding tax has already been deducted at source.
2. Depreciation of K1,220,480, amortization of intangible assets of K680,000, entertaining employees of K400,500, entertaining customers of K970,000, irrecoverable loans written off of K3,200,600, decrease in general provision for loan losses of K500,000, penalties for late payment of provisional income tax of K250,000, loss on disposal of assets of K80,220 and general allowable expenses of K10,455,600.

Included in the general expenses are directors' emoluments amounting to K1,650,000. All the directors are accommodated in houses owned by the company for which the directors paid no rent.

Other information

1. The company paid withholding tax of K1,260,000 on the interest income it received during the year.
2. Provisional income tax paid by the company for the tax year 2017 amounted to K5,075,215.

3. The only assets qualifying for capital allowances are fixtures & fittings which were bought three years ago at a cost of K1,800,000 and administration buildings which were acquired on 1 August 2017 at a cost of K60,000,000.

Required:

Calculate the income tax payable by Mutobo Bank Plc for the tax year 2017.

(15 marks)

- (b) Kabulungene Plc is a company engaged in farming in the Central province of Zambia. The company grows varieties of crops and fruits. The company listed its shares on the Lusaka Stock Exchange (LuSE) in 2016, when 30% of its shares were taken up by indigenous Zambians.

The company has always enjoyed super profits since its incorporation except in 2016 when it recorded a tax adjusted loss of K280,000. This loss was as a result of unfavorable weather conditions experienced during that farming season. For the year ended 31 December 2017, the company made a tax adjusted profit of K630,000.

The directors of the company are aware that farming enterprises can be allowed, upon making an irrevocable election, to average profits for two (2) consecutive charge years and pay income tax on the averaged profit. The directors, therefore, wish to make an irrevocable election to have the profits for the tax years 2016 and 2017 averaged so that income tax for the tax year 2017 can be paid on the average profit.

Required:

- (i) Explain the circumstances under which a farmer can make an irrevocable election to average the profits for two consecutive charge years. (2 marks)
- (ii) Calculate the income tax payable by Kabulungene Plc for the tax year 2017, assuming the irrevocable election to average the profits for 2016 and 2017 is successful. (4 marks)
- (iii) Calculate the income tax payable by Kabulungene Plc for the tax year 2017 if the irrevocable election to average the profits for 2016 and 2017 is not successful. (4 marks)

[Total: 25 Marks]

QUESTION FOUR

- (a) Mining is one of the major economic activities in Zambia. The debate has been on the best way for the mining sector taxation which would raise maximum revenue for the central

Government and at the same time attract and encourage potential investors in the mining sector.

Required:

Explain what mineral royalty tax is and how it is paid. Your explanation should include two (2) advantages and one (1) disadvantage of mineral royalty tax. (10 marks)

(b) Explain the circumstances under which a mining company can be allowed to index mining losses. (2 marks)

(c) Chipompi Mining Plc is a Zambian resident company engaged in mining. The company extracts industrial minerals in Zambia. The company is an 80% owned subsidiary of IM Mining Corporation, an American based Multinational company. The company has had the following results in recent years:

	2014	2015	2016	2017
	K	K	K	K
Sales revenue	4,500,000	5,944,000	7,500,000	11,600,00
Tax adjusted profit/(loss)	(1,600,000)	850,000	1,200,000	2,700,000

The following exchange rates have been provided by the Bank of Zambia and approved by the Commissioner General:

Date	K/US\$1
31 December 2014	8.20
31 December 2015	9.80
31 December 2016	10.50
31 December 2017	10.60

The indexation formula is provided below:

$$\left(1 + \left(\frac{R2 - R1}{R1}\right)\right)$$

Required:

(i) Show how the mining loss incurred in the year ended 31 December 2014 will be relieved in each of the relevant tax years, and calculate the final taxable mining

profit for the tax year 2017.

(10 marks)

- (ii) Compute the income tax payable by Chipompi Mining Plc for the tax year 2017.
(3 marks)

[Total: 25 marks]

END OF PAPER

JUNE 2017-BUSINESS TAXATION (D3)

SOLUTIONS

SOLUTION ONE

- (a) The persons who are required to register for VAT purposes are all persons carrying on businesses of making taxable supplies in Zambia where the turnover, excluding VAT, exceeds K800,000 for any period of twelve (12) months or K200,000 for any period of three (3) months.

In addition, a trader who **expects** the turnover of taxable supplies, excluding VAT, for the following 12 months to exceed K800,000 or for the following 3 months to exceed K200,000 must register for VAT immediately.

- (b)

For Tembani, the VAT exclusive turnover for the year 2017 is expected to be as follows:

	Monthly sales	Cumulative sales
January	55,000	55,000
February	70,500	125,500
March	72,000	197,500
April	85,000	282,500
May	89,000	371,500
June	95,200	466,700
July	96,800	563,500
August	97,000	660,500
September	90,000	750,500
October	108,600	859,100

Tembani's VAT exclusive turnover will exceed the annual threshold of K800,000 in October 2017. He will be required to notify ZRA of liability to register for VAT, within one month (that is, November 2017). This notification is done using form VAT 1.

He will be registered by ZRA effective 1 December 2017 or an agreed earlier date.

If the trader registers for VAT late, the penalty is 10,000 penalty units (K3,000) for each tax period the trader remains unregistered.

(c) **TEMBANI**

VAT PAYABLE FOR THE FIRST QUARTER ENDED 31 MARCH 2017

OUTPUT VAT	K	K
Sales: (K55,000 + K70,500 + K72,000) X 16%		31,600
INPUT VAT		
Purchases: (K23,200 X 3) X 4/29	9,600	
Motor car	-	
Motor van: (K81,200 X 4/29)	11,200	
Services: (K29,000 X 4/29)	4,000	
Petrol	-	
Diesel: (K9,860 X 4/29 X 90%)	<u>1,224</u>	
		<u>(26,024)</u>
VAT payable		<u>5,576</u>

- (d) Reverse VAT is the transfer of liability to account for and pay VAT on imported services from the person making the supply to the person receiving the supply.

Reverse VAT is only charged on imported services provided by a non-resident supplier where a tax agent has not been appointed to administer VAT. i.e. submitting of VAT returns and payment of VAT.

A service is considered imported if it is performed or undertaken in Zambia, and utilized (or if the benefit of its supply is for a recipient) in Zambia regardless of where it is performed.

Reverse VAT is not recoverable as input VAT when computing the VAT payable, except where a tax agent has been appointed.

SOLUTION TWO

- (a) A basis of assessment is a set of rules for establishing a basis period. A current year basis and preceding year basis may be used.

The current year basis is used to make income tax assessments for business profits where accounts are prepared to a date falling between 1 April and 31 December inclusive.

The preceding year basis is used to make income tax assessments for business profits where accounts are prepared to a date falling between 1 January and 31 March inclusive.

- (b) For the year ended 31 March 2017, the basis of assessment is the preceding year basis which is the tax year 2016, while for the nine (9) months ended 31 December 2017, the basis of assessment is the current year basis which is the tax year 2017.

- (c) **FRANK KABWILI**

TAXABLE BUSINESS PROFITS FOR THE TAX YEARS

	2016	2017
	K	K
Profits before capital allowances	380,000	402,000 (W1)
Capital allowances (W2)	<u>(34,000)</u>	<u>(82,750)</u>
Taxable profits	<u>346,000</u>	<u>319,250</u>

Workings

1. Taxable profit for the tax year 2017

Frank Kabwili changed the accounting date during the year and prepared financial statements for a period of nine (9) months. Since a continuing business should pay tax on the profits made for at least twelve (12) months, Frank's profits will be expanded into a notional twelve (12) months period in order to determine the taxable profits for the tax year 2017.

The tax payable for the tax year 2017 will be computed on the expanded profit.

$$K301,500 \times 12/9 = K402,000$$

2. Capital allowances

2016

	Cost/ITV K	Capital allowance K
<u>Toyota Pajero car</u>		
ITV b/f	128,000	
W & T @20%	<u>(32,000)</u> X75%	24,000
ITV c/f	<u>96,000</u>	
 <u>Equipment</u>		
ITV b/f	30,000	
W&T @25%	<u>(10,000)</u>	<u>10,000</u>
ITV c/f	<u>20,000</u>	
Total capital allowances		<u>34,000</u>

2017

<u>Toyota Pajero car</u>		
ITV b/f	96,000	
W&T @20%	<u>(32,000)</u> X75%	24,000
ITV c/f	<u>64,000</u>	
 <u>Equipment</u>		
ITV b/f	20,000	
W&T @ 25%	<u>(10,000)</u>	10,000
ITV c/f	<u>10,000</u>	
 <u>Fuso Truck</u>		
Cost	165,000	
W&T @25%	<u>(41,250)</u>	41,250
ITV c/f	<u>123,750</u>	
 <u>Computers</u>		
Cost	30,000	
W&T @25%	<u>(7,500)</u>	<u>7,500</u>
ITV c/f	<u>22,500</u>	
Total capital allowances		<u>82,750</u>

(d) **FRANK KABWILI**

INCOME TAX PAYABLE FOR THE CHARGE YEAR 2017

	K
Taxable profits	<u>319,250</u>

Computation

First K74,400	9,960
Balance K244,850 @37.5%	<u>91,819</u>
Tax payable	<u>101,779</u>

(e) The following are the persons required to pay provisional income tax :

1. Any person whose annual turnover exceeds K800,000
2. Any person whose income does not constitute income from employment
3. Any person whose taxable income is more than the tax free amount of K39,600 per annum.

The provisional income tax return should be submitted not later than 31 March 2017.

SOLUTION THREE

(a) **MUTOBO BANK PLC**

INCOME TAX PAYABLE FOR THE TAX YEAR 2017

	K	K
Net income before tax		23,400,200
Add:		
Depreciation	1,220,480	
Amortisation of intangible assets	680,000	
Entertaining customers	970,000	
Penalties for late payment of tax	250,000	
Loss on disposal of assets	80,220	
Free accommodation for directors (1,650,000 X 30%)	<u>495,000</u>	
		<u>3,695,700</u>
		27,095,900
Less:		
Royalties	400,000	
Rental income	100,000	
Dividends	80,000	
Decrease in general provision	500,000	
Capital allowances (W1)	<u>1,650,000</u>	
		<u>(2,730,000)</u>
Taxable business income		24,365,900
Add:		
Royalties		<u>400,000</u>
Total taxable income		<u>24,765,900</u>

Income tax @35%	8,668,065
Less:	
Provisional income tax paid	(5,075,215)
WHT on interest income	(1,260,000)
WHT on royalties (400,000 X 15%)	<u>(60,000)</u>
Income tax payable	<u>2,272,850</u>

Workings

1. <u>Capital allowances</u>	K
Fixtures and fittings (1,800,000 X 25%)	450,000
Administration building (60,000,000 X 2%)	<u>1,200,000</u>
Total capital allowances	<u>1,650,000</u>

- (b) (i) A farmer can be allowed to average profits of two consecutive charge years if:
- (1) The farmer made a loss in one consecutive charge year and a profit in the other consecutive charge year, and
 - (2) The profits for one consecutive charge year are substantially lower than the profits for the other consecutive charge year.

(ii) **KABULUNGENE PLC**
INCOME TAX PAYABLE FOR THE CHARGE YEAR 2017

	K
Taxable profit for 2017	630,000
Taxable loss for 2016	<u>(280,000)</u>
Total profits	<u>350,000</u>

$$\text{Average profits} = \text{K}350,000/2 \\ = \text{K}175,000$$

$$\text{Company tax} = \text{K}175,000 \times 10\% \\ = \text{K}17,500$$

(iii) **KABULUNGENE PLC**
INCOME TAX PAYABLE FOR THE CHARGE YEAR 2017

	K
Taxable profits for 2017	630,000
Less:	
Taxable loss b/f	<u>(280,000)</u>
Taxable farming profit	<u>350,000</u>

Company tax @10%

35,000

If the irrevocable election to average the profits for 2016 and 2017 is not successful, then the company will only carry forward the loss for 2016 to 2017 to be offset against the profits.

SOLUTION FOUR

- (a) Mineral royalty tax is a payment received as a consideration for the extraction of minerals in the Republic of Zambia.

Mineral royalty is payable by persons who hold large scale mining licences, small scale mining licences, gemstone licences (large and small) or artisan mining rights.

Mineral royalty tax is paid monthly and calculated at different rates as follows:

5% of norm value of the base metals produced other than copper

5% of gross value of industrial minerals and energy minerals produced

6% of gross value of gemstones, and 6% of norm value of precious metals produced

For copper mineral royalty tax is calculated at the rates ranging from 4% to 6% depending on the norm price of copper per metric tonne.

Mineral royalty tax is generally an allowable deduction when computing the taxable mining profits.

Advantages

- (i) It is a more reliable source of revenue for the central government, because mineral royalty tax is collected as soon as production commences.
- (ii) Mineral royalty tax is easier to administer because only sale volumes are needed to compute mineral royalty tax.

Disadvantage

- (i) Mineral royalty tax is seen to be unfair from the investor's point of view as running expenses are ignored when computing the tax.
- (b) A mining company can only be allowed to index the mining loss if it maintains its financial statements in foreign currency i.e. US dollars.

(c) **CHIPOMPI MINING PLC**

(i) **TAXABLE MINING PROFITS FOR THE CHARGE YEARS**

	2014	2015	2016	2017
	K	K	K	K
Tax adjusted profit/(loss)	(1,600,000)	850,000	1,200,000	2,700,000
Tax loss b/f (w1)	<u>-</u>	<u>(425,000)</u>	<u>(600,000)</u>	<u>(1,002,884)</u>
taxable profit/loss	<u>(1,600,000)</u>	<u>425,000</u>	<u>600,000</u>	<u>1,697,116</u>

Workings

Loss relief in 2015

	K
Indexed loss b/f	
$(1 + (9.80 - 8.20)/8.20) \times K1,600,000$	1,912,195
Amount of loss relief available: restricted to 50% of taxable mining profit (50% x K850,000)	<u>(425,000)</u>
Unrelieved loss c/f	<u>1,487,195</u>

Loss relief in 2016

	K
Indexed loss b/f	
$(1 + (10.50 - 9.80)/9.80) \times 1,487,195$	1,593,423
Amount of loss relief available: restricted to 50% of taxable mining profit (50% x K1,200,000)	<u>(600,000)</u>
Unrelieved loss c/f	<u>993,423</u>

Loss relief in 2017

	K
Indexed loss b/f	
$(1 + (10.60 - 10.50)/10.50) \times K993,423$	1,002,884
Amount of loss relief available	<u>(1,002,884)</u>
Unrelieved loss c/f	<u>Nil</u>

The maximum amount of profits that can be used to relieve any losses in the tax year 2017, will be computed as; $50\% \times K2,700,000 = K1,350,000$. The whole loss b/f therefore will be fully relieved as shown above.

(ii) **CHIPOMPI MINING PLC**

INCOME TAX PAYABLE FOR THE CHARGE YEAR 2017

	K
Taxable mining profit	<u>1,697,116</u>
Company tax @30%	<u>509,135</u>

END OF SOLUTIONS



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D4 – PERSONAL TAXATION

TUESDAY 13 JUNE 2017

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

Taxation Table

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

Income from farming for individuals

K1 to K39,600	first K39,600	0%
Over K39,600		10%

Capital Allowances

Implements, plant and machinery and commercial vehicles:

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

Non- commercial vehicles

Wear and Tear Allowance	20%
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Industrial Buildings:

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

Low Cost Housing (Cost up to K20,000)

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%
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Farming Allowances

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

Presumptive Taxes

Turnover Tax

Monthly turnover

K1 to K4,200
K4,200.01 to K8,300
K8,300.01 to K12,500
K12,500.01 to K16,500

Turnover Tax per month

3% of monthly turnover above K3,000
K225 per month+3% of monthly turnover above K4,200
K400 per month+3% of monthly turnover above K8,300
K575 per month+3% of monthly turnover above K12,500

K16,500.01 to K20,800	K800 per month+3% of monthly turnover above K16,500
Above K20,800	K1,025 per month+3% monthly of turnover above K20,800

Annual turnover

K1 to K50,400

K50,400.01 to K99,600

K99,600.01 to K150,000

K150,000.01 to K198,000

K198,000.01 to K249,600

Above K249,600

Turnover Tax per annum

3% of annual turnover above K36,000

K2,700 per annum+3% of annual turnover above K50,400

K4,800 per annum +3% of annual turnover above K99,600

K6,900 per annum+3% of annual turnover above K150,000

K9,600 per annum+3% of annual turnover above K198,000

K12,300 per annum +3% of annual of turnover above K249,600

Presumptive Tax for Transporters

Seating capacity	Tax per annum	Tax per day
	K	K
From 64 passengers and over	7,200	19.70
From 50 to 63 passengers	6,000	16.40
From 36 to 49 passengers	4,800	13.00
From 22 to 35 passengers	3,600	10.00
From 18 to 21 passengers	2,400	6.60
From 12 to 17 passengers	1,200	3.30
Less than 12 passengers and taxis	600	1.60

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%

Value Added Tax

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

Attempt all FOUR (4) Questions

QUESTION ONE

- (a) Explain the criteria used to determine whether an individual is liable to Zambian income tax. (4 marks)
- (b) **For the purposes of this question, you should assume that today's date is 10 December 2016 and that the earnings threshold for NAPSA contributions purposes is K214,706 per annum.**

Fumpa has been running a business since 2006. His business has grown significantly. The annual business turnover has always exceeded K800,000. He intends to bring his brother, Chifumbe, in the business on 1 January 2017 as either an employee or as a partner. Irrespective of whether Chifumbe is brought in as an employee or as a partner, Fumpa expects an adjusted business profit of K780,000 for the tax year 2017. The only asset owned by the business is a Toyota prado car which was acquired two (2) years ago at a cost of K90,000. The car is used by Fumpa for both business and private purposes. It has been agreed with the Commissioner General that the private use is 40%. The business will buy a Mitsubishi canter at a cost of K180,000 during the tax year 2017 which will immediately be brought into use and will be used wholly and exclusively for business purposes.

If Chifumbe is brought in the business as an employee, he will be entitled to an annual salary of K220,000. Fumpa as the owner of the business will draw an annual salary of K340,000 and will also be required to contribute 5% of Chifumbe's basic salary as employer's NAPSA contributions. Chifumbe will be required to contribute NAPSA at 5% of his basic salary. The adjusted business profit of K780,000 above is after all necessary adjustments but before capital allowances and salaries for both Fumpa and Chifumbe.

If Chifumbe is brought in the business as a partner, then Fumpa and Chifumbe will draw annual salaries of K340,000 and K220,000 respectively. They will share any balance of profits or loss in the ratio of 3:2. No NAPSA contributions will be made in this case. The adjusted business profit of K780,000 above is after all necessary adjustments but before capital allowances and salaries for both Fumpa and Chifumbe.

Required:

- (i) Calculate the income tax payable by Fumpa and Chifumbe for the tax year 2017 if Chifumbe is brought in the business as an employee. (8 marks)
- (ii) Calculate the income tax payable by Fumpa and Chifumbe for the tax year 2017 if Chifumbe is brought in the business as a partner. (9 marks)
- (iii) Advise Fumpa whether it will be beneficial to bring Chifumbe in the business as an employee or as a partner. Your answer should be supported by a computation of income net of income tax and NAPSA contributions. (4 marks)

[Total: 25 Marks]

QUESTION TWO

- (a) A Double taxation agreement is an agreement between two or more states that describes how the income earned in one state will be treated for tax purposes if remitted in the other state.

Required:

Describe **three (3)** main methods of giving double taxation relief on income earned from foreign sources. (6 marks)

- (b) **For the purposes of this question, you should assume that today's date is 26 December 2017 and that the earnings threshold for NAPSA contributions purposes is K214,706 per annum.**

Faith Chipenso was born in Zambia in 1977 and is married to Mr. Nonga who was also born in Zambia in 1970. Faith left Zambia for employment in United Kingdom (UK), upon completion of her Degree in Mechanical Engineering in 2011. The currency of the UK is the UK pound (UK£). Whilst in the UK, Faith had two children; Chifwani and Kishiba. Faith made various investments in shares of UK quoted companies, acquired houses in UK and opened fixed deposit accounts with UK banks.

On 1 April 2017, Faith Chipenso came back to Zambia with her family and immediately found employment with Kashiba Engine Solutions Ltd as a manager. Her contract of employment provided for an annual salary of K290,000, annual medical allowance of

K20,000 and a weekend allowance of 5% of the basic salary payable at the end of each month. In addition, the company provided Faith with a 3200 cc personal-to-holder car which the company acquired at a cost of K200,000. It is company's policy to pay utility bills in connection with managers' accommodation and Faith's bills for the tax year 2017 were K2,850 per month, all of were paid by the company.

Faith received bank deposit interest from UK banks of UK£4,000 and dividends from UK quoted companies of UK£2,250. The bank interest is net of UK tax at a rate of 20% while the dividends are net of UK tax at a rate of 25%. She also received rental income from houses based in the UK of UK£14,000. The rentals were received net of UK tax at a rate of 30%.

There is double taxation convention between Zambia and the UK that "All the income earned by Zambian residents from UK is taxable in Zambia at a rate of 10% of the income net of UK tax, as long as the income received is assessable in Zambia".

Faith paid tax during the tax year 2017 under the PAYE system amounting to K50,127. NAPSA contributions are at 5% of the basic salary. The exchange rate for the tax year 2017 averaged K11.80 per UK£1.

Required:

- (i) Advise Faith Chipenso of her domicile status and that of each of her family members. (5 marks)
- (ii) Calculate the income tax payable by Faith Chipenso for the tax year 2017. (12 marks)
- (iii) Explain the tax treatment of rental income received from UK. (2 marks)

[Total: 25 Marks]

QUESTION THREE

- (a) Explain any **five (5)** tests used to distinguish an employee from a self-employed contractor. (10 marks)
- (b) Companies normally set up share options schemes for its employees. There are tax benefits for both the employer and the employee where such a scheme is approved for tax purposes. However, such benefits do not normally apply where the share option scheme being operated by the employer is not approved for tax purposes.

Required:

- (i) Explain the tax consequences for an employee arising on the grant of share options, their exercise and subsequent sale of any shares in a share option scheme established by an employer which is not approved for tax purposes.
(5 marks)
- (ii) Explain any **six (6)** conditions that must be met for a share option scheme to be approved for tax purposes.
(6 marks)
- (iii) Explain any **four (4)** benefits for both the employee and employer of an approved share option scheme.
(4 marks)

[Total: 25 Marks]

QUESTION FOUR

- (a) Assume today's date is 1 December 2016. Eveless plans to start running a trading business on 1 January 2017, making supplies which are exempt for Value Added Tax purposes. The expected turnover of the business is K28,000 per month.

She expects expenditure to be incurred wholly and exclusively for business purposes. This includes employees' salaries of K8,000 per month, rental for business premises of K4,500 per month, electricity expenses of K1,200 per month, insurance of K1,600 per month and advertising expenses of K1,400 per month. She will draw K5,000 per month as her salary.

On 1 January 2017, she will purchase office equipment at a cost of K25,000 and furniture and fittings at a cost of K18,000 to be used wholly and exclusively for business purposes. She will charge depreciation at the rate of 25% per annum on a reducing balance basis on both the office equipment and the furniture & fittings.

Eveless will invest part of the capital of the business in 91 days treasury bills which will yield treasury bill interest of K28,000 (gross) for her business in the tax year 2017.

Required:

Advise Eveless on how she will be assessed to income tax on the income she will generate in the tax year 2017. Your answer should include:

- (i) An explanation of the tax treatment of the expenses she will incur wholly and exclusively for the purposes of running the business. (2 marks)
 - (ii) An explanation, supported by relevant computations, of the income tax treatment of the expenditure that will be incurred on the purchase of the office equipment and furniture & fittings to be used for business purposes. (3 marks)
 - (iii) An explanation of the income tax treatment of Treasury bill interest which will be received by the business in the tax year 2017. (2 marks)
 - (iv) A computation of the total tax that will be paid on the income she will generate in the tax year 2017 and stating the due date of turnover tax payment (3 marks)
- (b) Mwaka has been running a retail business for many years and prepares accounts to 30 June each year. The turnover from the business has always exceeded K900,000 per year. After preparing accounts for the year ending 30 June 2016 she ceased trading on 30 September 2017. The tax adjusted business profit before capital allowances for the fifteen (15) month period to 30 September 2017 was K480,000.

Mwaka had unused overlap profits brought forward of K70,000 on 1 July 2016, which arose when he changed his accounting date four years ago to a year end of 30 June, from the previous accounting date.

The business held the following assets qualifying for capital allowances. The Income Tax values of the assets at 1 July 2016 were as follows:

Asset	Income Tax Value	Original Cost
	K	K
Retail buildings	87,500	125,000
Mitsubishi van	82,500	110,000
Office furniture	15,000	60,000
Toyota Allion car	42,000	70,000

Mwaka has always had private use in the Toyota Allion car of 25%. On 30 September 2017, he sold all the business assets at the following amounts being their open market value on that date:

Asset	Proceeds
	K
Retail buildings	180,000
Mitsubishi van	35,000
Office furniture	10,000
Toyota Allion motor car	19,000

Required:

- (i) Explain the basis of assessment for the final two tax years of trading.
(3 marks)
- (ii) Compute the final taxable profits for each of two final tax years of trading.
(12 marks)

[Total: 25 Marks]

END OF PAPER

JUNE 2017-PERSONAL TAXATION (D4)

SOLUTIONS

SOLUTION ONE

- a) An individual is liable to Zambian income tax if that individual qualifies to be a resident or ordinary resident in the republic of Zambia.
An individual is resident in Zambia if:
 - (i) He/She is physically present in Zambia for more than 183 days excluding the date of arrival and the date of departure.
 - (ii) He/She is coming to Zambia for the purpose that will take more than 12 months, then on the date of arrival he/she will be held to be a resident.

- (iii) He/She comes to Zambia with intentions of establishing permanent residence, then on the date of arrival he/she will be held to be a resident.

b) FUMPA AND CHIFUMBE

(i) If Chifumbe is brought in the business as an employee

FUMPA

INCOME TAX PAYABLE FOR THE CHARGE YEAR 2017

	K	K
Business profit		780,000
Less:		
Chifumbe's salary	220,000	
Employer's NAPSA (K214,706 X 5%)	10,735	
Capital allowances (K90,000 X 20% X 60%) + (K180,000 X 25%)	55,800	
		<u>(286,535)</u>
Taxable business profit		<u>493,465</u>

Computation

First K74,400	9,960
Balance K419,065 @37.5%	<u>157,149</u>
Income tax payable	<u>167,109</u>

CHIFUMBE

INCOME TAX PAYABLE FOR THE CHARGE YEAR 2017

	K
Salary	220,000
Less:	
NAPSA (K214,706 X 5%)- restricted	<u>(3,060)</u>
Taxable income	<u>216,940</u>

Computation

First K74,400	9,960
Balance K142,540 @ 37.5%	<u>53,453</u>
Income tax payable	<u>63,413</u>

(ii) If Chifumbe is brought in the business as a Partner

FUMPA AND CHIFUMBE

INCOME TAX PAYABLE FOR THE CHARGE YEAR 2017

	K
Business profits	780,000
Less:	
Capital allowances	
(K90,000 X 20% X 60%) + (K180,000 X 25%)	<u>(55,800)</u>
Taxable profit	<u>724,200</u>

	TOTAL	FUMPA	CHIFUMBE
	K	K	K
Salary	560,000	340,000	220,000
Balance 3:2	<u>164,200</u>	<u>98,520</u>	<u>65,680</u>
Total	<u>724,200</u>	<u>438,520</u>	<u>285,680</u>

Computation

First K74,400	9,960	9,960
Balance K364,120/K211,280 @37.5%	<u>136,545</u>	<u>79,230</u>
Income tax payable	<u>146,505</u>	<u>89,190</u>

(iii) Net Income if Chifumbe is brought in the business as:

	An employee	As a Partner
	K	K
Business profit	780,000	780,000
Income tax: Fumpa	(167,109)	(146,505)
Chifumbe	(63,413)	(89,190)
NAPSA contributions:		
Employee's (K214,706 X 5%)	(10,735)	-
Employer's (K214,706 X 5%)	<u>(10,735)</u>	<u>-</u>
Net Income	<u>528,008</u>	<u>544,305</u>

It will be beneficial to engage Chifumbe as a partner rather than as an employee, because the net income under partnership is K16,297 (K544,305 – K528,008) higher than that of sole trader.

SOLUTION TWO

a. The following are the methods of giving double taxation reliefs:

i. **Treaty relief**

It is an agreement between two or more states on how the income earned in one state will be treated for tax purposes when remitted in the other state. The relief may provide for full recovery of any tax covered by the agreement. The treaty relief is given according to the provisions of the agreement.

ii. Unilateral Credit Relief

This relief is given unilaterally in the republic of Zambia where there is no treaty relief. The relief is given as a tax credit against the Zambian income tax on foreign income. The amount of tax available as a relief is the lower of:

- The actual amount of foreign tax paid to foreign tax authorities, and
- The Zambian tax chargeable on foreign income calculated using the formula:

$$\frac{\text{Gross amount of foreign Income}}{\text{Total Assessable income}} \times \text{Zambian tax charge}$$

iii. Unilateral expense relief

This relief applies where neither treaty relief nor unilateral credit relief is available. This relief is given by deducting the foreign tax from foreign income before including it in the Zambian income tax computations.

b. Foreign Taxation

- i. Domicile is the concept which relates to the place which an individual refer to as his/her permanent home.

Domicile can either be Domicile of origin which is acquired at birth (meaning individuals are domiciled in the country in which they are born).

Domicile of choice which is acquired by choice (meaning individuals can make a choice as to which country should be their permanent home once they attain the age of sixteen (16) years.

Faith Chipenso and her husband (Mr. Nonga) are domiciled in Zambia by birth because they were born in Zambia.

The children ie Chifwani and Kishiba are domiciled in the UK. However, they can acquire the Zambian domicile by choice upon attaining the age of sixteen (16) years.

**ii. FAITH CHIPENSO
INCOME TAX PAYABLE FOR THE CHARGE YEAR 2017**

	K	K
Zambian income		
Salary: K290,000 X 9/12		217,500
Medical allowance: K20,000 X 9/12		15,000
Weekend allowance: (K217,500 X 5%)		10,875
Utility bills: K2,850 X 9		<u>25,650</u>
		269,025
Less:		
NAPSA (K214,706 X 5%) restricted		<u>(3,060)</u>
Taxable income		<u>265,965</u>
Computation		
First K74,400		9,960
Balance K191,565 @37.5%		<u>71,837</u>
		81,797
Less: PAYE		<u>(50,127)</u>
		31,670
Tax on foreign income		
Bank interest: £4,000 X K11.80	47,200	
Dividends: £2,250 X K11.80	<u>26,550</u>	
Total taxable foreign income	<u>73,750</u>	
Zambian tax @10%		<u>7,375</u>
Total income tax payable		<u>39,045</u>

iii) Rental income

Rental income received by Zambian residents from investments in foreign based properties is exempt from Zambian income tax.

SOLUTION THREE

(a) The following test are applied to distinguish employees from the self employed

(1) Type of contract

If there is a **contract of service**, it will indicate the existence of a legal relationship of master and servant. A **contract for services** will indicate the existence of self-employment.

(2) Work performance

Employees must perform the duties assigned to them themselves while the self-employed may hire other people to perform the work for them. If a person does not have a right to hire helpers, that is likely to lead to the conclusion that there

is employment. The self-employed will normally have a right to hire their own helpers.

In contracts of service, personal performance is always required while in the case of contracts for services, there may be a requirement for personal performance or there may not be one. In other words, personal performance is not normally a must in contracts for services.

(3) Control

The work of an employee is controlled by the employer who will normally stipulate working hours, the place at which the duties are to be performed, how the work is to be performed and other conditions.

A self-employed person will decide when to perform the duties and how to perform them. Where there is an absence of the right of control, employment may still be present.

(4) Payment and financial risk

Employees are paid an agreed salary on a monthly or weekly basis and incur no form of financial risk. In order to earn an extra sum, employees will have to work overtime. Also, employees are going to get any other additional pay or variation in pay if they meet a set target in which case they will receive a bonus or a commission.

Employees do not assume any form of financial risk and they cannot profit from sound management of the business' affairs. Self-employed persons are normally paid a proportion of the contract price based on the amount of work performed. They will also bear the full financial risk of their business. If they manage their affairs well, they are going to profit from them.

(5) Place of work

Employees will normally be told where the duties are to be performed from. This is normally at the employer's premises or at the premises of the client. In most of the employments, the premises at which the duties are to be performed from are those of the employer.

Self-employed persons will perform the duties at a place of their choice. If the person performing duties can only do so at the employer's chosen premises, then that person is an employee. If the person can choose a place from where to perform the duties, that person is self-employed.

(6) Tools and equipment

An employer will provide the tools and equipment which the employees are to use. However, the fact that the employer does not provide the tools and equipment will not be conclusive. In certain types of employment, the employees will normally be required to provide their own tools and equipment.

Self-employed individuals will provide their own tools and equipment.

(7) Correction of work

Employees will normally rectify any faulty work during the normal working hours and they will still be paid for those hours. Self-employed persons will rectify any faulty work outside the contract time and they will not be paid for that extra work.

If the person performing duties is not paid for the time spent on correcting work, then that person is self-employed. On the other hand, if the person is paid for the time spent on correcting work, then that person is an employee.

(8) Engagement and dismissal

The employer will take on and dismiss employees. The employer will have a right or power to terminate the contracts of employment by giving the employees an appropriate notice.

A self-employed person will normally enter into a contract with a client specifying the beginning and end. The contract normally ends when the work has been performed completely and accurately.

(9) Insurance

Employers will normally provide insurance cover for the actions of their employees. This is because they are vicariously liable for the offences committed by their employees.

Self-employed persons will have to provide for their own insurance needs. The hirer is not vicariously liable for the offences committed by the hired self-employed contractors.

If the person who is performing the duties takes insurance cover personally, then that person is self-employed. But, if insurance cover is not taken by the person

performing the duties personally, then that person is an employee. The employer will have taken insurance cover on behalf of that employee.

(10) Exclusivity

Employees normally work for only one employer. A self-employed person will normally work for a number of clients.

The courts will also consider whether an individual's activity is fully integrated within the organisation. If this were the case, it would be difficult for an individual to prove that he/she is self-employed.

(b) (i) Tax consequences on the grant, exercise and sale of shares in an unapproved share option scheme

Grant – On the grant of shares to an employee in a share option scheme that is not approved, the exercise price is compared with the open market value of the shares on the date the options are granted.

If options over shares are granted with an exercise price that is less than the market value, an income tax charge can arise on the difference between the market price per share and the exercise price.

Exercise – On the exercise of the options, the individual pays the agreed amount in return for the specified number of shares in the company. The price paid is compared with the open market value at that time, and if less, the difference is charged to income tax.

Sale – On the sale of shares acquired by an employee through a share option scheme which is not approved, in an unlisted company, Property Transfer Tax is payable on the realised value of the shares sold.

(ii) In order for a share option scheme to be approved, the following conditions must be met :

- (1) The scheme must be established in Zambia and the employer must be carrying on a 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 of the company may participate in the scheme.
 - (5) The scheme entitles an employee to acquire a set number of shares at a fixed price.
 - (5) 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 benefits of operating an approved share option scheme for the employer are as follows:
- (1) Costs incurred by the employer to set up and administer the scheme will be allowed as a deduction in computing the company's profits for tax purposes.
 - (2) The income of an approved share option scheme will be exempt from tax.
 - (3) The employer will be exempt from paying Property Transfer Tax on shares transferred under the terms of an approved share option scheme.
 - (4) The employees' benefit is that any benefit which arises to him or her on allotment or acquisition of shares under an approved share option scheme is exempt from tax.

SOUTION FOUR

- (a) (i) The annual turnover of the business will be K336,000 (K28,000 × 12) which is below K800,000. Therefore, Eveless will be assessed under the turnover tax system as opposed to normal income tax on the business profits.

The expenditure to be incurred wholly and exclusively for business purposes will not be deductible from the monthly turnover for the purposes of computing the monthly turnover tax. This means that the employees' salaries, rental for business premises, electricity expenses, insurance and advertising expenses will not be deductible and neither will Eveless' own salary be deductible.

- (ii) Capital allowances on the office equipment and fixtures & fittings will not be claimable against turnover when computing the monthly turnover tax. However, these assets will notionally be written down for the purposes of calculating their income tax values to carry forward to the following year.

The amount of notional allowances and the income tax values of the assets at the end of the tax year 2017 will be as follows:

Asset	Value	Notional allowance
	K	K
<u>Office equipment</u>		
Cost	25,000	
Wear & tear allowance (K25,000 x 25%)	<u>(6,250)</u>	6,250
ITV c/f	<u>18,750</u>	
<u>Fixtures and fittings</u>		
Cost	18,000	
Wear & tear allowance (K18,000 x 25%)	<u>(4,500)</u>	4,500
ITV c/f	<u>13,500</u>	
Total notional allowances		<u>10,750</u>

- (iii) The Treasury bill interest will suffer withholding tax at the rate of 15% which will be deducted at source and this will be a final tax. The withholding tax will amount to K4,200 (K28,000 x 15%).

However since Eveless will be assessed under turnover tax, the withholding tax suffered on the treasury interest will be repaid. The amount of withholding tax to be repaid will be the whole amount of K4,200 which would have been deducted at source.

- (iv) COMPUTATION OF MONTHLY TURNOVER TAX PAYABLE

Since monthly turnover is expected to be K28,000, the turnover tax payable each month will be calculated as follows:

	K
Fixed Presumptive amount	1,025
Tax on turnover exceeding K20,800	
(K28,000 – K20,800) x 3%	<u>216</u>
Monthly turnover tax payable	<u>1,241</u>
The total amount of turnover tax Safeli will pay in the tax year 2017 will therefore amount to K14,892 (K1,241 x 12)	

The amount of turnover tax will be payable by the 14th day following the end of each month throughout the tax year 2017

- (b) (i) The basis of assessment for the final two tax year of trading will be

determined as follows:

The last period of trading consist of fifteen months from 1 July 2016 to 30 September 2017. This period will be split into the twelve months period to 30 June 2017 and the last three months period to 30 September 2017

Profits, as adjusted for taxation purposes but before capital allowances will then be apportioned on a time basis. The year ended 30 June 2017 is the basis period for the tax year 2017, while the three months period ended 30 June 2017 is the basis period for the tax year 2018.

The capital allowances will be calculated for the tax years when the implements, plant and machinery were used in the trade. Balancing adjustments will arise on disposal of all the assets on 30 September 2017. The net capital allowances will be deducted from the tax adjusted profits allocated to the relevant tax years.

(ii) COMPUTATION OF FINAL TAXABLE PROFIT

	2017 K	2018 K
Tax adjusted profit before capital allowances	384,000	96,000
Capital allowances (W)	<u>(55,500)</u>	<u>20625</u>
	328,500	116,625
Less overlap profits	<u>(Nil)</u>	<u>(70,000)</u>
Final taxable profits	<u>358,500</u>	<u>46,625</u>

WORKINGS

CAPITAL ALLOWANCES COMPUTATION

<u>Tax Year 2017</u>	K
<u>Retail building</u>	
Wear and tear allowance (K125,000 x 2%)	2,500
<u>Mitsubishi Van</u>	
Wear and tear allowance (K110,000 x 25%)	27,500

<u>Office furniture</u>		
Wear and tear allowance		
(K60,000 x 25%)		15,000

<u>Toyota Allion car</u>		
Wear and tear allowance		
(70,000 x 20%) x 75%		<u>10,500</u>
		<u>55,500</u>

K

K

Tax Year 2018

<u>Retail building</u>		
ITV b/f (K87,500 -2,500)	85,000	
Proceeds (restricted to cost)	<u>(125,000)</u>	
Balancing charge	<u>(40,000)</u>	(40,000)

<u>Mitsubishi Van</u>		
ITV b/f (K82,500 – K27,500)	55,000	
Proceeds	<u>(35,000)</u>	
Balancing allowance	<u>20,000</u>	20,000

<u>Office furniture</u>		
ITV b/f (K15,000 – K15,000)	Nil	
Proceeds	<u>(10,000)</u>	
Balancing charge	<u>(10,000)</u>	(10,000)

<u>Toyota Allion car</u>		
ITV b/f (K42,000 – K10,500)	21,500	
Proceeds	<u>(19,000)</u>	
Balancing allowance	<u>12,500</u>	X 75%
Net balancing charge		<u>9,375</u>
		<u>(20,625)</u>

END OF SOLUTIONS



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D5: INTERNATIONAL TAXATION

THURSDAY 15 JUNE 2017

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.
2. This question paper consists of **FOUR (4)** questions of Twenty Five (25) marks each. You must attempt all the **FOUR (4)** questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **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.

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

Income from farming for individuals

K1 to K39,600	first K39,600	0%
Over K39,600		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US\$4,500	4% of norm value
From US\$4,500 to less than US\$6,000	5% of norm value
From US\$6,000 and above	6% of norm value

Mineral Royalty on other minerals

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

Capital Allowances

Implements, plant and machinery and commercial vehicles:

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

Non- commercial vehicles

Wear and Tear Allowance	20%
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Industrial Buildings:

Wear and Tear Allowance	5%
Initial Allowance	10%

Investment Allowance		10%
Low Cost Housing	(Cost up to K20,000)	
Wear and Tear Allowance		10%
Initial Allowance		10%
Commercial Buildings		
Wear and Tear Allowance		2%
Farming Allowances		
Development Allowance		10%
Farm Works Allowance		100%
Farm Improvement Allowance		100%

Presumptive Taxes

Turnover Tax

Monthly turnover

K1 to K4,200
K4,200.01 to K8,300
K8,300.01 to K12,500
K12,500.01 to K16,500
K16,500.01 to K20,800
Above K20,800

Turnover Tax per month

3% of monthly turnover above K3,000
K225 per month+3% of monthly turnover above K4,200
K400 per month+3% of monthly turnover above K8,300
K575 per month+3% of monthly turnover above K12,500
K800 per month+3% of monthly turnover above K16,500
K1,025 per month+3% monthly of turnover above K20,800

Annual turnover

K1 to K50,400
K50,400.01 to K99,600
K99,600.01 to K150,000
K150,000.01 to K198,000
K198,000.01 to K249,600
Above K249,600

Turnover Tax per annum

3% of annual turnover above K36,000
K2,700 per annum+3% of annual turnover above K50,400
K4,800 per annum +3% of annual turnover above K99,600
K6,900 per annum+3% of annual turnover above K150,000
K9,600 per annum+3% of annual turnover above K198,000
K12,300 per annum +3% of annual of turnover above K249,600

Presumptive Tax for Transporters

Seating capacity	Tax per annum	Tax per day
	K	K
From 64 passengers and over	7,200	19.70
From 50 to 63 passengers	6,000	16.40
From 36 to 49 passengers	4,800	13.00
From 22 to 35 passengers	3,600	10.00
From 18 to 21 passengers	2,400	6.60
From 12 to 17 passengers	1,200	3.30
Less than 12 passengers and taxis	600	1.60

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%

Value Added Tax

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

Customs and Excise

Duty rates on:

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

Customs Duty:

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

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

- 2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:**

Customs Duty

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

Excise Duty:

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

Customs Duty:

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

Excise Duty:

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

- 4. Trucks/lorries with gross weight exceeding 20 tonnes**

Customs Duty:

Percentage of Value for Duty Purposes	15%
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Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	0%
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5. Surtax

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

Attempt all FOUR (4) questions

QUESTION ONE

Mandebwe Plc is a Zambian resident company that is involved in farming activities. The company owns a building in Zimbabwe, which is let to Harare Ltd. It listed its shares on the Lusaka Stock Exchange (LuSE) on 6 January 2017 and offered 37% of its shares to indigenous Zambians. The following relates to the tax year 2017:

	K
1. Zambian taxable business profits	1,334,000
2. Royalties received (gross)	100,000
3. Dividends received (net) from a Zambian company	85,000
4. Rent (net) from Harare Ltd – Zimbabwe	75,000
5. Debenture interest (net) from a Zambian bank	42,500
6. Bank interest (gross) from a Zimbabwean bank	18,000

Appropriate rates of withholding (WHT) were deducted from royalties, dividends and bank interest from Zambian sources.

The rent from Harare is net of 20% Withholding (WHT).

The bank interest from Zimbabwe was received net of 35%.

The company paid provisional tax on the due dates for 2017 of K10,000.

During the year, the company incurred the following expenditure:

	K
Tractor	220,000
Fencing	72,000
Stumping	14,000

The expenditure has not been taken into account in the computation of the taxable business profits given above. All other necessary adjustments have already been taken into account.

The Finance Director of Mandebwe Plc needs assistance on the general tax treatment of domestic business profits and investment income of non-residents. This will assist the board in evaluating the expansion strategies.

Required:

- (a) Discuss the general tax treatment of domestic business profits and investment income of non-residents. (12 marks)
- (b) Explain how world-wide income for individual residents is generally taxed and state whether this infringes on the non-discrimination rules of tax treaties. (4 marks)
- (c) Calculate the income tax payable by Mandebwe Plc for the charge year 2017, using the unilateral credit relief. (9 marks)

[Total: 25 Marks]

QUESTION TWO

Nambi Plc is a multinational company resident in Zambia. It has expanded rapidly and currently operates in six countries. The Managing Director is a strong believer in international trade as a key driver in maximizing shareholder wealth. During the year ended 31 December 2017, the results were as follows:

	K
1. Business profit (note 1)	3,754,000
2. Bank interest (gross)	200,000
3. Rental income from a property owned by the company	140,000

Note. 1

In arriving at the profit for the year ended 31 December 2017, the following items were charged in the statement of profit or loss:

	K
• Depreciation	300,000
• Entertaining auditors	6,000
• Legal fees in respect of issue of ordinary shares	50,000

- Salaries for four full time, differently-abled employees 288,000

In addition, the following expenditure was incurred during the year:

- Manufacturing machinery K2,320,000 (VAT inclusive)
- Motor car (60% private use) K40,000 (VAT inclusive)

The company transferred goods costing K900,000 to a subsidiary in Brazil. The cost has been included as part of sales. The profit margin is 25%.

Capital allowances on the non-current assets bought during the year have not been taken into account.

Required:

- (a) Explain **three (3)** theories that underpin international trade. (9 marks)
- (b) Explain domestic law approaches to international tax avoidance. (4 marks)
- (c)
 - (i) Calculate the final income tax paid by Nambi Plc for the tax year 2017 and state the due date, without taking into account the transfer pricing rules. (7 marks)
 - (ii) Calculate the final income tax paid by Nambi Plc for the tax year 2017, taking into account the transfer pricing rules. (3 marks)
 - (iii) Comment on your answers for (c) (i) and (c) (ii). (2 marks)

[Total: 25 Marks]

QUESTION THREE

For the purpose of this question assume that today's date is 31 December 2017.

Bibi Kafeka, aged 41 years, is resident in Zambia. During the tax year 2017, she had the following incomes:

	K
Salary - Zambia	750,000 per year
Salary – Utopia (Net of Utopian tax of K37,500)	125,000 (note 1)
Gratuity (equivalent to 40% of cumulative basic pay)	432,000 (note 2)

Notes:

1. The figure is the amount received from 1 January 2017 to 31 March 2017.
2. Gratuity was received on the expiry of her five year Utopian contract, on 31 March 2017.

Bibi Kafeka was born in Utopia but has been living in Zambia since 1 May 2017, when she started working for an international company, which is resident in Zambia.

Bibi Kafeka is entitled to a medical allowance of K7,500 per month, and is accommodated in a company owned house. She has also been given a personal to holder car. She has heard that if tax is based on worldwide income, she will pay more tax. Bibi Kafeka paid 5% of her basic salary as NAPSA contributions.

The income tax laws and pension contribution rules in Zambia are the same as in Utopia. According to the double taxation convention between Zambia and Utopia, terminal benefits received by Zambian residents from Utopia is exempt from Zambian tax, while any other income (net of Utopian tax) is taxable in Zambia.

Note: The earnings threshold for NAPSA contributions purposes is K214,706 per annum.

Required:

- (a) Discuss the importance of taxing residents receiving overseas employment income.

(5 marks)

- (b) Define emolument and explain the tax treatment of benefits in kind in Zambia.

(6 marks)

- (c) Calculate the total income tax payable by Bibi Kafeka, for the tax year 2017.

(8 marks)

- (d) Explain what a double taxation convention is and state any **four (4)** roles that it plays.

(6 marks)

[Total: 25 Marks]

QUESTION FOUR

- (a) Briefly define tax havens, and explain **four (4)** benefits of foreign direct investment (FDI) for the host country.

(6 marks)

- (b) International tax issues revolve around two main concepts that are also fundamental reasons or causes of international juridical double taxation. These two concepts are known as the concept of source and the concept of residence; both concepts arise from domestic tax law provisions, which distinguish between two types of taxpayers:

1. Non-residents – these would generally have limited nexus (connection) with the country in question, however the income received by these taxpayers will have an economic link i.e. will originate in the particular country. This country wishes to levy tax on this taxpayer, however, only in respect of the income originated therein (having source in this country), normally referred to as source taxation and sometimes known also as limited tax liability.
2. Residents – these would have a close personal and economic connection (nexus) with the country in question and the country chooses to tax this taxpayer on his/her worldwide income. This practice is referred to as worldwide taxation and sometimes known also as unlimited tax liability.

Required:

- (i) Explain, in as much detail as possible, the "Concept of source" in international taxation. (8 marks)
- (ii) State how source taxation can be justified. (2 marks)

- (c) Lufina is resident in Zambia and runs a business in partnership with a friend who is resident in the UK. The partnership has two branches and the profits for the year ended 31 December 2017, were as follows:

	K
• Zambian Branch	700,000
• UK Branch	1,220,000

The profits have been adjusted for tax purposes. Profits and losses are shared between Lufina and her partner in the ratio of 3:5.

In addition, Lufina received royalties of K170,000 (net) from a Zambian source during the tax year 2017. Provisional income tax paid for tax year 2017 was K150,000.

Required:

Compute the income tax payable by Lufina for the tax year 2017, assuming credit is available against Zambian income tax on foreign income earned by Zambian residents. (9 marks)

[Total: 25 Marks]

END OF PAPER

JUNE 2017 – INTERNATIONAL TAXATION (D5)

SOLUTIONS

SOLUTION ONE

(a) Domestic Business profits of non-residents

The case of business income of a non-resident sourced in a country, income attributable to permanent establishment (or otherwise associated with a permanent establishment and sourced in the country) is generally taxed on a net assessment basis. Tax treaties usually require this approach in the case of income subject to the business profits article but, because of their convoluted drafting, the actual extent of this obligation is not obvious at first sight. The business profits article is usually expressed to be subject to other articles of the treaty, but then other articles either refer the matter back to the business profits article in respect of profits attributable to a permanent establishment (dividends, interest, royalties, and other income) or adopt in effect the same rule as the business profits article.

Articles that may involve business profits and that override the tax treaty requirement of taxation on a net basis concern income from immovable property, international transport, and entertainment and sporting activities. In the case of international transport, source taxation is generally excluded (although the UN Model has a little-used variant for shipping) and in the case of entertainment and sporting activities, taxation on

a gross withholding basis is permitted. Taxation by withholding is usually permitted for dividends, interest, and royalties that are not attributable to a permanent establishment.

To the extent that the domestic law provides for taxation, on a net or a withholding basis, of technical fees paid to non-residents, tax treaties will usually override and prevent the tax levy if the fees are not attributable to a permanent establishment while requiring as a result of the non-discrimination article that a deduction be given to the permanent establishment or resident company that incurred the expenses, subject to the amount being at arm's length in the case of related parties. Non-resident companies may try to exploit this situation, but depending on the circumstances, it may be possible to find means within the tax treaty to levy tax on both the technical fees and on the salaries of the personnel providing the services.

One particular problem that some transaction countries experience in the area of business income is the treatment of deductions. In a number of countries, the tax laws, for the purpose of wage control, have denied deductions for wages in excess of a very low threshold. Deductions for other expenses, such as advertising and interest, may also be limited. While it is unlikely that tax treaties will be interpreted to override the denial of deductions in marginal areas where denial is quite common under domestic laws, it is another matter where a fundamental matter of profit determination such as the treatment of wages is concerned.

Domestic investment income of non-residents

In the case of investment income (e.g. dividends, interest and royalties) paid to non-residents, domestic law usually provides for flat-rate final withholding tax on the gross amount if they are sourced in the country and not attributable to a permanent establishment. The tax rate is typically set at 20-30 percent in developing and transition countries and then is often reduced to 10-20 percent in tax treaties. The rates are set at this level in domestic law to leave room for negotiating in the tax treaty process but usually to be below the normal company tax rate in recognition of the fact that the tax is gross and does not take account of expenses. In tax treaty negotiations, developing and transition countries will come under considerable pressure from industrial countries to reduce withholding tax rates on interest and royalties to zero or near zero. The argument used by industrial countries is that the gross tax often wipes out the entire profit, with the result that the price charged to the resident or permanent establishment in the country is increased (i.e., the tax is passed back to the payer) with adverse consequences for the import of capital and technology.

- (b) Worldwide income for residents will be taxed based on the tax rules obtaining in the country of residence of the individual. Personal allowances will be given to all individual

taxpayers on a whole-year basis to any individual who is resident for part of or all of the tax year.

Confining personal reliefs to residents of a country does not infringe the non-discrimination rules of tax treaties, which generally seek to ensure that residents and non-residents are treated alike under the tax law of the country.

The reliefs are recognized as part of the residence jurisdiction of the taxing country, so that residents and non-residents are not treated as being in the same circumstances, which is a threshold condition for the application of the non-discrimination principle.

As tax treaties otherwise do not deal with personal reliefs, the tiebreaker rule in the tax treaty that addresses dual residence will not carry over into domestic law for this purpose. Hence, a dual resident will be entitled to the personal reliefs in more than one country, and a special rule in domestic law limiting entitlement to reliefs in such cases is necessary.

(c) **Mandebwe Plc**

Company income tax computation – 2017

	K	K
<u>Farming income</u>		
Business profit (W1)		1,028,000
<u>Non-farming income</u>		
Royalties	100,000	
Debenture interest (42,500 x 100/85)	50,000	
Bank interest	<u>18,000</u>	
		<u>168,000</u>
Taxable income		<u>1,196,000</u>
Income tax		
Farming income K1,028,000 x 3% (W3)		30,840
Non-farming income : K168,000 x 28%		<u>47,040</u>
Income tax liability		77,880
Less: DTR (W2)		(1,082)
Provisional tax		(10,000)
WHT – Royalties (100,000 x 15%)		(15,000)
WHT – Debenture interest (50,000 x 15%)		<u>(7,500)</u>
Company income tax payable		<u>44,298</u>

Workings

1. Business profit

	K
Business profit (given)	1,334,000
Less: Capital allowances (100%)	
Tractor	(220,000)
Fencing	(72,000)
Stumping	<u>(14,000)</u>
Company income tax payable	<u>1,028,000</u>

2. Double Taxation Relief (DTR)

Lower of :

Foreign tax $18,000 \times 35\% = \underline{K6,300}$

Zambian tax

$$\underline{18,000} \times (77,880 + 15,000) = \underline{K1,082}$$

(1,196,000 + 100,000)

DTR is therefore K1,082, which is the lower figure.

3. Actual income tax rate

	Farming (%)	Non-farming (%)
Normal income tax rate for farming	10	35
Less: Listing reduction	<u>(2)</u>	<u>(2)</u>
	8	33
Less: Share offer reduction	<u>(5)</u>	<u>(5)</u>
Actual income tax rate	<u>3</u>	<u>28</u>

SOLUTION TWO

(a) Theories of international trade are:

1. Mercantilism – this theory states that nations should accumulate financial wealth through exports and discouraging imports. This would be achieved through trade surpluses, government intervention and colonization and these three things worked together.

Trade surpluses were maintained through the colonization of underdeveloped territories for their raw materials. The country would colonise these underdeveloped countries, ship the raw materials needed for export back to the home country and export the finished product around the world.

The Government intervention occurs when they ban certain imports or impose a tariff on these imports. At the same time, the government would subsidize their own industries to expand exports.

2. The theory of Absolute Advantage – a country is said to have an absolute advantage in the production of a good when it is more efficient than another country in the production of that good, i.e. when it can produce more of a particular good with a given amount of resource than another country. It is a fairly common situation for one country to be more efficient than another in the production of a particular good.

The difference in this theory is that trade should not be banned or restricted by tariffs but allowed to flow freely according to the demand of the market. This theory also states that the objective should be that the people of the country have a higher living standard by being able to obtain goods more cheaply and in greater abundance. The theory measures a nation's wealth on the living standards of the people and not on the money the country has in its reserve.

Greater specialization will, however, increase total output. If each country specializes in the production of the good in which it is most efficient, i.e. possesses absolute advantage, then total output would increase.

3. The Theory of Comparative Advantage – using this theory, the country in question may not be able to produce the good more efficiently than any other good within its own country. This type of trade is accomplished if, say, one country has the absolute advantage in two different types of exports but it costs more monetarily or in labour than another country. This second country then has the comparative advantage. It is able to produce and export this second good to the first country cheaper and more efficiently.

Put simply, 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. Specialisation and trade can still be mutually advantageous, however, even if one country has an absolute advantage in the production of both goods.

The Law of Comparative Advantage espouses that two countries can gain from trade when each concentrates on the production of that good in which it has greatest comparative cost advantage. Comparative cost relates to the opportunity costs of producing the goods and not the absolute costs. "EACH COUNTRY SHOULD EXPORT GOODS IN WHICH IT HAS A COMPARATIVE COST ADVANTAGE".

- (b) Tax avoidance in cross-border transactions is a growing problem for countries worldwide. With business becoming increasingly international, there is a greater need for coherent structures that facilitate cross-border transactions and help protect economies that are increasingly fragile and reliant on one another. An example of such a structure is the double tax treaty networks which are designed to prevent international double taxation.

However, double taxation agreements pose a particular problem. This is because they provide opportunities for taxpayers to avoid domestic tax obligation 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. International tax avoidance poses a threat to the integrity of domestic tax systems and the flow of revenue governments receive from them.

To counter-act undesirable avoidance, countries enact general and specific anti-avoidance rules to protect their domestic interests. There are two fundamental principles to consider when evaluating approaches to the relationship between tax treaties and domestic anti-avoidance rules:

1. The application of anti-avoidance rules may undermine the certainty of law and the inviolability of agreements struck between nations. This is balanced against the domestic interests of a state in maintaining the integrity of their tax system and not having their tax revenue exploited by abusive taxpayers.
2. Whether the domestic anti-avoidance rules themselves conflict with treaties.

The OECD Commentary gives guidance in this area.

- (c) (i) Nambi Plc

Computation of income tax payable 2017

	K
Business profit (W1)	3,098,000
Bank interest	<u>200,000</u>
Taxable income	<u>3,298,000</u>
Income tax payable	
3,298,000 x 35%	1,154,300

Less: tax already paid	
WHT = Bank interest (200,000 x 15%)	<u>(30,000)</u>
Company income tax payable	<u>1,124,300</u>

Due date: 21 June 2018

Workings

1. Business profit

	K	K
Given in the question		3,754,000
Add:		
Depreciation	300,000	
Entertaining auditors	6,000	
Legal fees – issue of shares	<u>50,000</u>	
		<u>356,000</u>
		4,110,000
Less:		
Capital allowances (W2)	1,008,000	
Differently-abled allowance (1,000 x4)	<u>4,000</u>	
		<u>(1,012,000)</u>
Taxable business profits		<u>3,098,000</u>

2. Capital allowances

	K	K
<u>Manufacturing machinery</u>		
Cost 2,320,000 x 25/29	2,000,000	
Wear and tear allowance 2,000,000 x 50%	<u>(1,000,000)</u>	1,000,000
Income tax value carried forward	<u>1,000,000</u>	
<u>Motor car</u>		
Cost	40,000	
Wear and tear allowance 40,000 x 20%	<u>(8,000)</u>	8,000
Income tax value carried forward	<u>32,000</u>	
Total capital allowances for 2017		<u>1,008,000</u>

(ii) Nambi Plc

Computation of income tax payable 2017

	K
Business profit (W1)	3,398,000

Bank interest	<u>200,000</u>
Taxable income	<u>3,598,000</u>
Income tax payable	
3,598,000 x 35%	1,259,300
Less: tax already paid	
WHT = Bank interest (200,000 x 15%)	<u>(30,000)</u>
Company income tax payable	<u>1,229,300</u>

Working

1. Business profit

	K
As in c (i) above	3,098,000
Adjustment for transfer pricing	
900,000 x 25/75	<u>300,000</u>
Taxable business profit	<u>3,398,000</u>

(iii) Comment

Nambi Plc is using transfer pricing to avoid tax. In Zambia, rules prevent a company to transfer goods from Zambia to another country at a price that is lower than the market price of those goods. As such, when a Zambian company is required to transfer goods produced in Zambia to a company that is resident abroad, then the transfer price shall be equal to at least the market value of the goods. Similarly, when a Zambian resident company makes a loan to a foreign related company, it must charge interest on that loan at a commercial rate.

Hence, the Zambia Revenue Authority (ZRA) would expect Nambi Plc to account for the difference in tax of K105,000 (K1,229,300 – K1,124,300) and pay it to ZRA.

SOLUTION THREE

- (a) The main reasons for taxing residents on their worldwide income have to do with fairness of the tax system. When a country adopts a progressive income tax rate scale for individuals, it is usually motivated by the idea that it is fair for higher-income individuals to pay proportionally more of their income as tax.

Unless, however, the individual is taxed on worldwide income, this goal may not be achieved for an individual with income from more than one country.

If the progressive tax rates are the same in each country and each country taxes only on a source basis, an individual receiving income from each country may pay less tax in

total to both countries than an individual who receives the same total amount of income from only one of the countries.

This is very unfair; not only are two like individuals taxed differently, but individuals are obviously encouraged to split their income between the countries, an avenue that is more likely to be availed of by a high-income taxpayer.

There is also a lack of neutrality in such a system because of the splitting incentive that it creates.

- (b) Emolument include all salaries, wages, fees, bonuses, commissions, overtime pay, leave pay, gratuity, benefits and advantages, allowances and all payments which an individual receives as a result of being employed or being a holder of an office. The term emolument is therefore quite broad.

A benefit in kind is a benefit of some sort which is not money. Benefits in kind include the benefits derived from employment through the use of personal to holder vehicles and through the provision of free residential accommodation by the employer.

Benefits which cannot be converted into cash are not treated as emoluments of employees. These benefits are taxable on the employer instead. They include the accommodation benefit and the personal to holder car. Benefits which can be converted into cash are taxable on the employees receiving them.

The accommodation benefit is 30% of the taxable emoluments of the respective employee(s), while the personal to holder car benefit depends on the cylinder capacity as follows:

	Per annum (K)
• Car with cylinder capacity of less than 1,800cc	18,000
• Car with cylinder capacity from 1,800cc, but less than 2,800cc	30,000
• Car with cylinder capacity of 2,800cc and over	40,000

- (c) Bibi Kafeka (ignoring any double taxation relief)

Personal computation of income tax payable 2017

	K
Salary (Zambia) $8/12 \times 750,000$	500,000
Medical allowance $7,500 \times 8$	60,000

Salary (Ethiopia)	<u>125,000</u>
	685,000
NAPSA (K214,706 X 5%)	<u>(3,060)</u>
Taxable income	<u>681,940</u>

Income tax	
First K74,400	9,960
Balance K607,540 x 37.5%	<u>227,828</u>
Income tax payable	<u>237,788</u>
Gratuity paid is wholly exempt.	

Accommodation benefit and Personal to holder car are taxed on the employer.

- (d) Double taxation conventions are agreements between two countries that aim to eliminate the double taxation of income or gains arising in one territory and paid to residents of another territory. They work by dividing the tax rights each country claims by its domestic laws over the same income or gains.

Double taxation convention has the following roles:

1. Protect against the risk of double taxation where the same income is taxed in two states
2. Provide certainty of treatment for cross-border trade and investment
3. Prevent excessive foreign taxation and other forms of discrimination against business interests abroad.
4. Protect government's taxing rights and protect against attempts to avoid or evade tax
5. They also contain provisions for the exchange of information between national taxation authorities.
6. Seek to encourage and maintain an international consensus on cross-border economic activity and to promote international trade and investment.

SOLUTION FOUR

- (a) Tax havens are countries with lenient tax rules or relatively low tax rates which are often designed to attract foreign investment.

Some of the benefits of FDIs to the host country include:

1. Improved economic growth due to the influx of capital and increased tax revenue.
2. In most cases, improved infrastructure.
3. Greater competition from new companies leading to productivity gains and greater efficiency.
4. Improve corporate governance standards.
5. Transfer of soft skills through training.
6. Availability of more advanced technology
7. Access to research and development resources.
8. Creation of employment opportunities.

- (b) (i) The jurisdiction to impose income tax is based either on the relationship of income (tax object) to the taxing state (commonly known as the situs principle) or the relationship of the taxpayer (tax subject) to the taxing state based on residence or nationality.

Under the source principle, a State's claim to tax income is based on the State's relationship to that income.

Section 18 of the Income Tax Act of Zambia discusses the concept of income sources as detailed here under the clauses 1.3:

1. Income is deemed to be from a source within the Republic if that income:
 - arises under any agreement made in the Republic for the sale of goods, irrespective of whether those goods have been or are to be delivered in the Republic;
 - is remuneration from employment exercised or office held in the Republic or if it is received by virtue of any service rendered or work or labour done by a person or partnership in the carrying on in the Republic of any business, irrespective of whether payment is made outside the Republic, or by a person resident outside the Republic;

- is remuneration for services rendered outside the Republic to the Government or any statutory corporation if that person rendering the services is resident outside the Republic solely for the purpose;
 - is a pension granted by a person wherever resident, irrespective of where the funds from which it is paid are situate, or where payment is made, except where the employment or office for which the pension is granted was wholly outside the Republic, and the emoluments were never charged to tax in the Republic;
 - arises from interest incurred in the production of income or in the carrying on of a business in the Republic or paid direct or indirectly out of funds derived from within the Republic;
 - arises from a royalty incurred in the production of income or in the carrying on of a business in the Republic or paid directly or indirectly out of funds derived from within the Republic;
 - arises from the carriage, by a person who is not resident in the Republic, of passengers, mails, livestock or goods embarked, shipped or loaded in the Republic other than passengers embarking in transit through the Republic or mails, livestock or goods shipped or loaded on transshipment through the Republic;
 - arises from a management or consultant fee incurred in the production of income or in carrying on of a business in the Republic and is received by a person or persons in partnership for a service other than such part thereof as is rendered by the person or persons in partnership in the carrying on of a business in the Republic; or
 - arises from commission incurred in the production of income or in the carrying on of a business in the Republic, or paid directly or indirectly out of funds derived from within the Republic.
2. Where a business is carried on partly within and partly outside the Republic by a person to whom this subsection applies or where such a person receives a share of the profits of a business carried on in partnership partly within and partly outside the Republic, the whole of the person's share of the profits of the business or Partnership is deemed to have been received from a source within the Republic.
3. Subsection (2) shall apply to:
- any individual who is ordinarily resident in the Republic; and
 - to any person, not being an individual, who is resident in the Republic.

- (iii) Source taxation is generally justified on the ground that the State has contributed to the creation of the economic opportunities that allow the taxpayer to derive income generated within the territorial borders of the State. A State would generally invoke the source principle to tax income derived from the extraction of mineral deposits located within its territorial boundaries. The State can also use its power and tax income if the assets and activities that generated it are located within its borders. Income itself does not have a geographical location.

(c) Lufina

Income tax payable – 2017

	K
Share of partnership profits:	
Zambian branch (3/8 x K700,000)	262,500
SE branch (3/8 X K1,220,000)	457,500
Royalties 170,000 x 100/85	<u>200,000</u>
Taxable income	<u>920,000</u>
Income tax	
First K74,400	9,960
Balance K845,600 x 37.5%	<u>317,100</u>
Income tax liability	327,060
Less: tax already paid	
Provisional tax	(150,000)
Double taxation relief (w1)	(137,250)
WHT – Royalties (200,000 x 15%)	<u>(30,000)</u>
Income tax payable	<u>9,810</u>
Due date: 21 June 2018	

Workings

1. Double taxation relief

Foreign tax paid: K1,220,000 X 30% = K137,250

Zambian equivalent tax

(Gross foreign income/Total assessable income) X Zambian tax charge

(K457,500/K920,000) X K327,060

= K162,641

The relief is, therefore, K137,250 because it is the lower of the Zambian tax.

END OF SOLUTIONS



TAXATION PROGRAMME EXAMINATIONS

DIPLOMA LEVEL

D6: TAX AUDIT AND INVESTIGATIONS

MONDAY 12 JUNE 2017

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.
2. This question paper consists of **FOUR (4)** questions of Twenty Five (25) marks each. You must attempt all the **FOUR (4)** questions.
3. Enter your Student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **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.

TAXATION TABLE

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

Income from farming for individuals

K1 to K39,600	first K39,600	0%
Over K39,600		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US\$4,500	4% of norm value
From US\$4,500 to less than US\$6,000	5% of norm value
From US\$6,000 and above	6% of norm value

Mineral Royalty on other minerals

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

Capital Allowances

Implements, plant and machinery and commercial vehicles:

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

Non- commercial vehicles

Wear and Tear Allowance	20%
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Industrial Buildings:

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

Low Cost Housing (Cost up to K20,000)

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%
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Farming Allowances

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

Presumptive Taxes

Turnover Tax

Monthly turnover

K1to K4,200
K4,200.01to K8,300
K8,300.01 to K12,500
K12,500.01 to K16,500
K16,500.01 to K20,800
Above K20,800

Turnover Tax per month

3% of monthly turnover above K3,000
K225 per month+3% of monthly turnover above K4,200
K400 per month+3% of monthly turnover above K8,300
K575 per month+3% of monthly turnover above K12,500
K800 per month+3% of monthly turnover above K16,500
K1,025 per month+3% monthly of turnover above K20,800

Annual turnover

K1to K50,400
K50,400.01 to K99,600
K99,600.01 to K150,000
K150,000.01 to K198,000
K198,000.01 to K249,600
Above K249,600

Turnover Tax per annum

3% of annual turnover above K36,000
K2,700 per annum+3% of annual turnover above K50,400
K4,800 per annum +3% of annual turnover above K99,600
K6,900 per annum+3% of annual turnover above K150,000
K9,600 per annum+3% of annual turnover above K198,000
K12,300 per annum +3% of annual of turnover above K249,600

Presumptive Tax for Transporters

Seating capacity	Tax per annum	Tax per day
	K	K
From 64 passengers and over	7,200	19.70
From 50 to 63 passengers	6,000	16.40
From 36 to 49 passengers	4,800	13.00
From 22 to 35 passengers	3,600	10.00
From 18 to 21 passengers	2,400	6.60
From 12 to 17 passengers	1,200	3.30
Less than 12 passengers and taxis	600	1.60

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%

Value Added Tax

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

Customs and Excise

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%
5. **Surtax**
 - On all motor vehicles aged more than five (5) years from year of manufacture** K2,000

Attempt all FOUR (4) questions

QUESTION ONE

- (a) The Government needs a lot financial resources in order to fund capital projects such as roads and current expenditure on the civil service. A lot of sectors contribute to the national budget through the taxes collected from such sectors by the Zambia Revenue Authority (ZRA). Financial Services Providers such as banks, being custodians of financial resources for individuals and companies, transactions that are initiated through the banking systems are taxed as well.

Required:

In relation to the taxation of Banking Institutions, explain the following concepts:

- | | | | |
|--------|--|----|---|
| (i) | Separate source of income. | (| 3 |
| | marks) | | |
| (ii) | Realisation basis for income recognition. | (| 3 |
| | marks) | | |
| (iii) | Third party guarantee. | (| 3 |
| | marks) | | |
| (iv) | Credit card income. | (| 3 |
| | marks) | | |
| (b) | (i) Define the term 'derivative'. | (2 | |
| marks) | | | |
| | (ii) Explain the two (2) types of derivatives. | (4 | |
| | marks) | | |

(iii) Explain the income tax implications of finance leases. (3 marks)

(c) Explain limited scope audits and the importance of available evidence on the scope and nature of any audit activity undertaken. (4 marks)

[Total: 25]

Marks]

QUESTION TWO

(a) Likeheem Plc, is a Zambian registered company, operating in the construction industry, which is listed on the Lusaka Stock Exchange (LuSE). The following income statement (statement of Profit or loss) has been prepared for the year ended 31 December 2017:

	K'000
Gross profit	585,350
Royalties (net)	42,500
Dividends from Z Ltd (a Zambian company) (net)	<u>30,000</u>
	657,850
Expenses:	
Increase in general provisions for bad debts	(1,360)
Directors emolument (note 1)	(50,000)
Depreciation of equipment	(92,890)
Entertainment (note 2)	(6,280)
Staff wages and salaries	<u>(10,250)</u>
Net profit	<u>497,070</u>

Additional information:

Note 1

The company's Director of Finance and Director of Engineering are accommodated in company owned houses. If these houses had been rented out, the gross rent payable would have been K234,000 per annum for each house. The emoluments of each of the director in the year ended 31 December 2017, were as follows:

	K'000
Director of Finance:	720
Director of Engineering:	540

Note 2

This relates to entertainment expenditure for:

	K'000
Customers	1,470
Esteemed suppliers	1,610
Members of staff	3,200

Note 3

The Director of Finance and Director of Engineering were provided with the following personal to holder motor cars:

Director of Finance:	Suzuki Grand Escudo with a cylinder capacity of 2,400 cc.
Director of Engineering:	Nissan Navara with a cylinder capacity of 3,200cc.

Both motor cars were purchased at a cost of K180,000 each in January 2012. It was agreed with the Commissioner General that in the tax year 2017, the Director of Finance used the car 80% for business purposes with the remainder being for private purposes, while the Director of Engineering used the car 70% for business purposes with the remainder being for private purposes.

Note 4:

The company has employed a blind man since 2011 as a telephone operator on a full time basis.

Note 5:

The income tax values and original cost of implements, plant and machinery qualifying for capital allowances at 1 January 2017, were as follows:

Cost	Income Tax Value
K'000	K'000

Plant and machinery	89.00	44.50
Motor Van	50.00	25.00
Computer	48.00	24.00

Required:

- (i) Calculate the company's Income Tax Payable for the charge year 2017. (11 marks)
- (ii) Explain the rules relating to giving Tax Inspectors access to third party information. (4 marks)
- (iii) Explain the meaning of the following terms, using mining as an example:
1. Ring-fencing (2 marks)
 2. Transfer pricing (2 marks)
 3. Arm's length principle (2 marks)
- (b) Discuss any **four (4)** clauses which were contained in the development agreements relating to mining tax regimes that were given to mining companies. (4 marks)

[Total: 25

marks]

QUESTION THREE

- (a) Briefly explain the meaning of the following:
- (i) Tax investigation (5 marks)

- (ii) Risk based approach (5 marks)
- (b) Explain the tax rules relating to the following types of loans:
 - (i) Loans to effective shareholders (4 marks)
 - (ii) Loans from the shareholders to a company (4 marks)
- (c) Briefly explain any **five (5)** methods of extracting profits from a family business. (5 marks)
- (d) Explain briefly **two (2)** reasons for using retained earnings as a means of financing of capital projects for a limited company. (2 marks)

[Total: 25]

Marks]

QUESTION FOUR

- (a) In the quest to increase the country's revenue, all income earners resident in Zambia are expected to contribute to the national treasury through payment of taxes to the Zambia Revenue Authority (ZRA). However, not all tax payers declare the correct amount of taxes as would be expected. A tax audit is therefore carried out in order to ascertain the validity of financial information as declared by the tax payer. Auditing theories have been developed by a number of scholars in order to strengthen the auditing profession.

Required:

- (i) Explain **four (4)** main purposes of carrying out a tax audit. (4 marks)
- (ii) Discuss **four (4)** main auditing theories that have contributed to the evolution of the audit profession. (8 marks)
- (b) In order to perform a quality tax audit, audit evidence should be relevant, reliable and sufficient.

Required:

Explain the meaning of each of the following terms in the context of tax audits:

- | | | |
|-------|-------------------------------|----|
| (i) | Relevant evidence
marks) | (2 |
| (ii) | Reliable evidence
marks) | (2 |
| (iii) | Sufficient evidence
marks) | (2 |
- (c) Having sent an engagement letter to the client, the auditor is expected to carry out certain important processes or activities in performing a tax audit that will lead into the finalisation of the audit report.

Required:

Briefly explain **seven (7)** activities generally carried out during a tax audit. (7 marks)

[Total: 25

marks]

END OF PAPER

JUNE 2017-TAX AUDIT AND INVESTIGATIONS (D6)

SOLUTIONS

SOLUTION ONE

- (a) Explanation of the meaning of concepts
- (i) **Separate source of income** refers to treating income separately for tax purposes by looking at the unique activities that give rise to a particular income and taxing such income separately. For instance, income that is not realised from the principal activity of a bank. This could include rent from real property, interest receivable from an investment outside the banking sector. Such income should be disclosed separately from the income that a bank generates from the principal or core activity of their business.
 - (ii) **Realisation basis for income recognition is also known as revenue recognition principle.** This refers to the application of accruals concept towards the recognition of revenue (income). In this regard revenue is recognised by the seller when it is earned and not when actual cash is received. For example in the sale of goods, the seller usually recognises income when goods are delivered to the customer and not when the customer pays the debt. In the case of banks, income is generally recognised when the services are completed.
 - (iii) **Third party guarantee** is a third party who promises to provide payment on a bond, loan, or other liability in the event of default. Banks often serve as guarantors on behalf of certain clients. Guarantors reduce the risk to loans and liabilities, and usually improve the credit agency ratings of bonds.
 - (iv) **Credit card income** arises in cases where the individual or company wants to borrow money or goods from the creditor. He/she has to disclose the source of

- income and availability of income before a credit card is issued. The source of income could include wages and salaries and rental income.
- (b) (i) Derivatives are financial instruments whose value is derived from the value of an underlying assets, such as shares and bonds.
- (ii) The two types of derivatives are:
- (i) Privately traded over the counter (OTC) derivatives such as interest swaps. These do not go through an exchange or other intermediaries.
 - (ii) Exchange traded derivatives (ETD) that are traded through specialised derivatives exchanges or other exchanges. Examples can be forward contracts and hedging of financial instruments in money markets.
- (iii) A finance lease is basically an agreement that allows the legal ownership of the leased asset to be transferred from the lessor to the lessee on full payment of all of the lease payments. Usually, the effective ownership of the leased asset is given to the lessee in anticipation of the transfer of the legal ownership. Hire Purchase is one example of a finance lease. Under a finance lease, just as is the case with hire purchase, the lessee is allowed to claim capital allowances each year of assessment.
- (c) Limited scope audits are also known as Issue based audits. These are confined to specific issues on a tax return and/or a particular tax scheme arrangement employed by the tax payer. The objective is to examine key potential risk areas of non-compliance. These audits consume relatively fewer resources than full audits and allow for an increased coverage of the taxpayer population.

Available evidence is important because it normally points to the likely risks of non-compliance and a taxpayer's prior history. Extensive audit inquiries may also be justified simply because a taxpayer's financial and/or business activities are unusually complex.

SOLUTION TWO

- (a) (W1) Calculation of capital allowances.

Assets	K	Capital allowances
Plant& machinery		K
ITV b/d	44,500	

Wear & tear 25%	<u>(22,250)</u>	22,250
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ITV c/d	<u>22,250</u>	
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Motor Van

ITV b/d	25,000	
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Wear & tear 25%	<u>(12,500)</u>	12,500
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ITV c/d	<u>12,500</u>	
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Computer

ITV b/d	24,000	
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Wear & tear 25%	<u>(12,000)</u>	<u>12,000</u>
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ITV c/d	<u>12,000</u>	
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Total capital allowances		<u>46,750</u>
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- (a) (i) Likeheem Plc
Company income Tax Computation for the charge year 2017.

	K'000	K'000
Net profit		497,070
Add Back:		
Depreciation		92,890
Increase in general provisions		1,360
Entertainment		
-Customers		1,470
-Suppliers		1,610
Accommodation benefit		
-Director-Finance (30 x 720)		216
-Director-Engineering (30 x 540)		162
Car benefits		
-Director- Finance		15
-Director-Engineering		<u>20</u>
		594,813.00
Less:		
Disability allowance	1.00	

Capital allowances (W1)	46.75	
Royalties	42,500.00	
Dividends	<u>30,000.00</u>	
		<u>(72,547.75)</u>
Taxable profit		<u>522,265.25</u>
Company taxable income		
	K'000	
Business profit	522,265.25	
Royalties (42,500 * 100/85)	<u>50,000.00</u>	
Taxable income	<u>572,265.25</u>	
Company income tax		
35% * 572,265.25	200,292.84	
Less:		
Withholding tax on Royalties	<u>(7,500.00)</u>	
Company income tax payable.	<u>192,792.84</u>	

(ii) Giving Tax Inspectors access to third party information

All countries have legal provisions to support the auditor in cases where the taxpayer provides unsatisfactory information or the auditor must verify taxpayer's information using an independent or third party source. However, these provisions set limitations for auditors that can be summarised as follows:

- Protection under a professional pledge of secrecy e.g. lawyers, public and tax accountants;
- Protection of trade or industrial secrets; and
- Protection of taxpayer's privacy.

(iii)

1. Ring fencing in relation to mining companies implies that mining companies were expected to disclose separate financial statements in order to avoid transferring costs to other performing companies. Therefore noncurrent assets of non-performing mining companies should not be used to claim capital allowances from continuing firms.
2. Transfer pricing is a scheme in which some mining companies can sell mining products to other subsidiaries where there is a low tax regime. This is legitimately done by them but with a view to paying less tax in regions in which they are duly registered where the tax rates are slightly higher.

3. Arms length principle states that a transaction that is at arm's length is one in which considerations or sells are made without any party being influenced by any other party or situation. It can also be referred to as an open market value in which the buyer and seller have equal bargaining power.
- (b) Clauses contained in Development agreements.
- (i) Income tax act: was levied at 25% on taxable profit. In arriving at taxable profit, three principal deductions were made and these were mineral royalty tax, price participation payments, capital expenditure incurred during the year. The period for which losses could be carried forward varied between companies but typically was between 10 and 20 years. Losses from hedging could be counted alongside normal operating costs when calculating gross taxable profits.
 - (ii) Mineral royalty taxes: this was levied at 0.6 %on the gross value of sales less cost of transporting, insurance and processing and refining of mineral products. This meant that the true tax burden was less if the base was purely gross sales value. The value as sales was calculated using the realized price submitted to the company than standard price as per London Metal exchange (LME).
 - (iii) Price participation agreement: this acted like a variable rate mineral royalty tax, they were levied on the gross value of production less transport costs and the rate varied according to the LME price. This was not an official charge but was levied and paid to ZCCM holdings.
 - (iv) Fiscal stability clauses: Each development agreement contained a clause that stated that the government of the Republic of Zambia should not adversely alter the tax regime for a given period of time. This period ranges from 10 to 20 years.

SOLUTION THREE

- (a) (i) A **Tax investigation** is an in-depth examination process by the tax authority in order to recover under-declared tax payments in the previous year's assessment. This is mainly carried out when a tax payer is suspected of tax evasion or schemes that under-states tax payments. This will include a check that all documents that have been submitted to the tax authority are correct and complete. This means that the taxpayer needs to keep good records at all times and maintain them for potential enquiries.
- (ii). **Risk based approach** refers to the development of auditing techniques which are responsive to risk factors in a taxpayer's business environment. The Auditor applies judgement to determine what level of risk relates to the different areas of a client's system and design appropriate audit tests. This approach should ensure that the greatest audit

efforts is directed at the riskiest areas, so that the chance of detecting errors is improved and time is not spent on unnecessary testing of safe areas.

- (b) (i) **Loans to effective shareholders.** – If a company makes a loan to an effective shareholder, it will be required to make a payment to tax authorities on the loan. The tax related amount paid to ZRA, is at the rate of 37.5%. Such loans include advances to shareholders who are also directors of the companies and the associates of shareholders who could be spouses.

Tax authorities have been concerned that companies have been arranging loans in a way that seeks to avoid tax. If the loan obtained is repaid, the tax paid will be refunded.

(ii) **Loans from shareholders to the company** – These are debt like, forms of financing that are provided to the company by shareholders. These loans to the company usually have a longer duration of maturity with deferred interest payments or low interest. If the shareholder had entered into an arrangement, whereby loans are converted into equity, then at such a time, they can increase the previous values of equity that was held by the shareholder.

The contribution of shareholder loans to a corporation's capital structure generally relieves the corporation's debt load and is therefore used to manage a degree of leverage. Shareholders can extend the loan in distressed or near-default situations to save the company.

- (c) (i) **Salary or dividend.**

The most common question is whether it would be tax efficient to extract cash through a salary or a dividend. Salary is paid net to employees after deduction of income tax and pension deduction. Dividends are paid to shareholders of a company out of profits that have already been taxed. Dividend payments are normally subject to personal tax (Withholding tax – WHT) in the hands of the recipient individual.

- (ii) **Interest or income**

To the extent that a family member has loaned money to the company or own property that is occupied by the company, the payment of interest or rent can be a way of extracting cash without incurring an additional cost of pension contributions, which would be payable on the salary. This could prove to be a tax efficient way of extracting cash from the business.

- (iii) **Pension contributions**

The family company can make contributions into a pension scheme. This can be a very efficient way of cash extraction but pension benefits are subject to taxation when they are withdrawn and the member might not be eligible to take cash out of a pension until some years down the line.

Any pension contribution should be viewed as part of an individual's remuneration package and should be proportional to the duties performed for the company to avoid the possibility of ZRA challenge.

(iv) **Diverting income**

A common idea is to divert income to another family member, perhaps a spouse or child who might be a non-(or basic rate) tax payer.

To be defensible in the event of a ZRA challenge, any individual's total remuneration package must be proportionate to the work performed for the company and compatible to an arm's length salary.

(v) **Withdrawing investment from a family business**

The family must balance withdraws with the rate of investment in the business. One method to monitor the balance is to compare the withdrawal to the total sum available for the business investment. The total sum available can be measured as earnings before interest, taxes, depreciation, and amortisation (EBITDA). The family withdraws should not normally exceed 25% to 35% of EBITDA given that the family business is profitable.

(d)

1. The company will not pay interest on retained earnings as this is the reserved capital of the firm over a period of time.
2. There are no charges on this form of financing and no issue costs as it can be issued without much publicity.

SOLUTION FOUR

(a) (i) A tax audit can be referred to as an investigation into the background of the tax returns that have been submitted by the tax payer be it an individual or corporate entity to the Zambia Revenue Authority (ZRA) .It could be that a self-assessment form has been filled in by an individual in which case an amount of tax has been calculated by the individual.

The tax agencies such as ZRA, undertakes a tax audit whose aim is to ensure compliance with tax laws by the tax payers and develop various initiatives of promoting voluntary compliance.

A tax audit can also be done in order to review a tax return as part of routine of the process of increasing the detection of minor errors that may be present on any return.

It can also be used as a means of checking whether the tax payer has been compliant with the tax payments.

(ii) **Auditing theory.**

Auditing was primarily designed to detect fraud, technical errors and errors of principles. However, case law recognises the fact that it is unreasonable to expect auditors to detect all aspects of fraud. General theories in auditing have evolved to increase or broaden the role of auditors which now include value for money audits.

The four auditing theories according to Hayes et al (2005) are described below:

Policeman theory.

The theory held the view that that the auditor is responsible for searching, discovering and preventing fraud. However this view has changed and the auditor is expected to provide reasonable assurance and verify the truth and fairness of the financial statements by way of expressing an opinion.

The lending credibility theory.

The theory suggests that the primary function of an audit is to add credibility to the financial statement by way of expressing an opinion that users of financial statements can rely upon. It can also resolve the agency problem as management would know that auditors will audit and scrutinize the books of accounts.

The theory of inspired confidence (theory of rational expectations)

This is the theory that satisfies the demand for audit. An audit should be supplied as a service. The demand side for audit services is as a result of demand for audit services by users of financial statements and other third parties such as creditors. Investors have provided capital and would like to see accountability in the use of their investments. On the other side, the supply of audit services, suggested that auditors need to strive to meet the expectations of stake holders in order to reduce the audit expectation gap.

Agency theory (Watts and Zimmerman 1986)

This suggested that an auditor acts on behalf of both third parties such as shareholders as well as management. Management are agents who should obtain services such as goods, or other services and sell or transfer these services at a higher value in order to maximize the return on shareholders investments. Auditing theory has been expanded in

order to provide other views on audit perception that auditors are just about detecting audit fraud.

- (b) An explanation of the following terms:
 - (i) Relevant evidence: An auditor needs to collect evidence that gives a direct relationship between work done and the audit opinion arrived at. Therefore there should be a clear and logical relationship between audit objectives, evidence and opinion arrived at.
 - (ii) Reliable evidence: Evidence that is collected should be consistent or credible in order for shareholders to have confidence in the audit opinion arrived at. Therefore there will be a need to use procedures and international audit standards.
 - (iii) Sufficient evidence: Sufficient relate mainly to the quantity of audit evidence that has been collected and usually linked to materiality levels of the financial statements. The quantity of the audit evidence relates to the size of the sample and that of the company as well.
- (c) The seven steps or activities to take after an auditor have sent an engagement letter.
 - (i) Planning: planning and controlling audit work is essential to performing audit work to the required standard of skill and care.
 - (ii) Ascertain accounting systems: auditors inquire into and ascertain client accounting system and internal controls in order to understand how accounting data is prepared and to gain an impression as to whether the accounting system can be relied upon.
 - (iii) Test of controls and transactions: controls must be tested if the auditor intends to rely on them. A record must be tested in order to obtain the evidence that they are reliable for the preparation of financial accounting.
 - (iv) Verifications of assets and liabilities: The figures appearing in the financial statements need to be verified.
 - (v) Review of financial statements; this is done in order to see if overall they can be sensible.
 - (vi) Obtain management representations: the auditor should ask management to confirm formally the truth and fairness of certain aspects of financial statements.
 - (vii) Sign auditor's report: after the directors have approved the report , there will be a need to sign the report.

END OF SOLUTIONS