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**CERTIFIED PUBLIC ACCOUNTANT  
ADVANCED LEVEL 2 EXAMINATIONS**

**A2.1: STRATEGIC CORPORATE FINANCE**

**DATE: WEDNESDAY 29, MAY 2024**

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**INSTRUCTIONS:**

- 1. Time Allowed: 3 hours 45 minutes (15 minutes reading and 3 hours 30 Minutes writing).**
- 2. This examination has two sections: A & B.**
- 3. Section A has one Compulsory Question while section B has three optional questions to choose any two.**
- 4. Attempt three questions in total.**
- 5. Marks allocated to each question are shown at the end of the question.**
- 6. Show all your workings where necessary.**
- 7. The question paper should not be taken out of the examination room.**



## SECTION A

### QUESTION ONE

#### Capital budgeting

The directors of RUKUNDO Ltd (RL) is exploring a greenfield project in a developing market. The project aims to construct a state-of-the-art hospital facility in Rwanda, serving both the local community and the broader region. RL Ltd has secured a substantial loan from one of Rwanda's leading banks to finance this ambitious project.

**Project Overview:** Initial Investment: FRW10 Billion, Nominal pre-tax Cash Flow Projection:

Years	Year 1	Year 2	Year 3	Year 4	Year 5
Scenario 1	FRW 1.5 billion	FRW 2.0 billion	FRW 2.5 billion	FRW 3.0 billion	FRW 3.5 billion
Scenario 2	FRW 2 Billion	FRW 2.5Billion	FRW 3 Billion	FRW 5.5Billion	FRW 4 Billion

**Source:** RL projection 2023

- 1) Inflation Rate:** The project assumes an annual inflation rate of 5%. This rate accounts for the expected increase in prices and costs over time.
- 2) Required Real Rate of Return:** RL Ltd has set a required real rate of return of 15% per year. This rate reflects the minimum rate of return the project must generate to justify the investment, adjusted for inflation.
- 3) Terminal Value:** The terminal value of the project will be determined using the perpetuity growth model. It assumes a 4% annual growth rate beyond Year 5. This approach captures the project's long-term value and sustainability.
- 4) Equal Probability of Cash inflow Flow in two scenarios:** The project assumes an equal probability of achieving cash flows above the stated values every year. This balanced approach acknowledges the potential variability in project performance and outcomes.
- 5) Tax is 30%**

#### Additional Complexities and Information:

- 1) Legal Costs:** RL Ltd has already disbursed FRW500,000,000 in legal expenses during the initial project phases. Furthermore, an estimated FRW300,000,000 is earmarked for legal expenditures in Year 2, primarily to ensure regulatory compliance and obtain necessary licensing.
- 2) Feasibility Study:** To ascertain the project's feasibility, RL Ltd has undertaken a comprehensive feasibility study, incurring costs amounting to FRW1.2 billion. This in-depth study serves as a crucial foundation for project evaluation and decision-making.
- 3) Dynamic Inflation:** Although the initial two years maintain a consistent inflation rate of 5%, Year 3 and subsequent periods will witness inflation variations. This approach accommodates the ever-changing economic conditions and is integral to the project's financial modeling and risk assessment.



## Portfolio

MUNEZERO Plc (MP) is considering whether to invest in one of the two firms ABAHO Ltd and BERWA Ltd Investment in each business would require an initial investment of FRW 10 million and MP expects to avail the resources to one of the two firms.

The Directors of MP believe that returns from the new projects will depend on which of the four economic conditions prevails during the year. At present the shares of both companies are traded at FRW 100. The expected prices of shares for the two firms and their probabilities under four economic conditions are given below as follows:

Economic Condition	Probability	Expected price of ABAHO Ltd.'s shares FRW	Expected price of BERWA Ltd.'s shares FRW
Boom	0.30	150	140
Normal	0.40	110	100
Recession	0.20	120	130
Recovery	0.10	100	90

### Required:

- Using the discounted cash flow method, advise the Directors of RL whether to proceed with the investment proposal (20 marks)
- Estimate IRR of the above project, (No calculations required) (3 marks)
- Discuss with the Directors of RL three methods that can be used for financing mergers and takeovers (3 Marks)
- Explain one advantage and one disadvantage of management buy-ins to the Directors of RL (2 Marks)
- With calculations evaluate whether MP should invest in ABAHO Ltd or BERWA Ltd and provide a comment on the decision undertaken based on their risks. (15 Marks)
- You have been requested by the management of MP to explain to them two merits and two limitations of the Capital Asset Pricing Model (CAPM) (4 Marks)
- Describe three portfolio management processes that a firm should considered before undertaking any investment (3 Marks)

(Total: 50 Marks)



## SECTION B

### QUESTION TWO

#### VIRUNGA PARTNERS LIMITED

VIRUNGA PARTNERS Ltd is a private equity company headquartered in Rwanda with a mandate to manage Impact Africa Fund that invests in equity instrument with special consideration of Economic Social Governance (ESG) factors. During the recent investment committee meeting, a deal team member presented a potential deal that was sourced while attending an annual CEO forum held in Tunis in march 2022. The project is called Habor run by a Trust Investment Ltd.

The committee expressed concerns over the project's performance in recent years, which has been below expectations. However, one director informed the committee that from the experience, the low performance is temporary and the company will benefit from the presented deal.

The following are key highlights of project Habor:

#### Governance structure

During the assessment of Governance, the deal team has identified that the company's Chair of the board has been the CEO over 20 years. The company's organogram shows that there are three chartered accountants working in logistics, marketing, and human resource departments respectively. However, the chief accountant is expected to have a bachelor's degree in engineering with over five years of experience in finance.

#### Business development and marketing department

The company has no research and development (R&D) department. however, the CFO who has background in accounting is the one who is responsible for analyzing and proposing developments and initiatives needed in company but he has never presented a market study that shows gaps in the market that the company should address. the marketing department focuses on TV and radio advertisement but has never done a market survey to analyze whether customers' needs are being satisfied by the company.

#### Working capital management

The CFO has presented that the company keeps good working relationships with its suppliers through paying them on time and never exceeds 15 days. CFO mentioned that to maintain good relationships with customers, the company offers 90-days credit, a policy that has been applied for over 15 years. He, however, mentioned that the company sometimes has difficulty in its working capital that require them to use overdraft facilities that are very expensive compared to its normal cost of capital.



## Compliance

The company's CEO has revealed that the company is compliant with all applicable laws and regulations. When asked how the company reports its suspected non-compliance with tax laws, the CEO responded that the company hired a tax consultant who has helped the company to categorize its revenue streams. On advice of the hired tax consultant, a significant portion of revenues is invoiced in the names of goods that are either VAT zero-rated or exempted when those names are totally different from the actual categories of goods.

### Required:

- a) Discuss SIX potential symptoms of corporate failure that Virunga Partners Limited's deal team should consider if they decide investing in project Habor. (12 Marks)

The following information has been extracted from the financial statements of AHEZA Ltd

Statement of profit or loss extracts		
	FRW "000"	FRW "000"
Sales		12,000
Cost of sales:		
Raw materials	5,800	
Labor	3,060	(8,860)
<b>Gross profit</b>		<b>3,140</b>
Administration/distribution costs		(1,680)
<b>Profit before interest and tax</b>		<b>1,460</b>

Financial position statement extracts		
	FRW"000"	FRW"000"
<b>Current assets:</b>		
Inventories of raw materials	1,634	
Inventories of finished goods	2,018	
Trade receivables	1,538	
Cash and bank	500	<b>5,690</b>
<b>Current Liability:</b>		
Trade payables	1,092	
Overdraft	300	
Other expenses	76	<b>1,468</b>



MUHOZA Ltd, a factoring company, has offered to take over AHEZA's debt administration and credit control on a non-recourse basis for an annual fee of 2 per cent of sales. This would save AHEZA Ltd FRW160,000 per year in administration costs and reduce bad debts from 0.5 per cent of sales to nil. MUHOZA would reduce trade receivables days to 40 days and would advance 75 per cent of invoiced debts at an interest rate of 10 per cent. MUHOZA Ltd finances working capital from an overdraft at 8 per cent.

**Required:**

- b) (i) Discuss ways in which AHEZA could improve the management of its receivables. (5 Marks)**
  - (ii) Using the information given, assess whether AHEZA should accept the factoring service offered by Powell. What use should the company make of any finance provided by the factor. (6 Marks)**
  - c) Discuss TWO indicators that may show when a company is in danger of overtrading. (4 Marks)**
- (Total: 25 Marks)**

**QUESTION THREE**

BUTARE Plc is a major international company with its head office in Kenya. Its shares and bonds are quoted on a major international stock exchange.

BUTARE Plc is evaluating the potential for investment in an area in which it has not previously been involved. This investment will require FRW 900 billion to purchase premises, and equipment and provide working capital.

Extracts from the most recent (2023) statement of the financial position of BUTARE Plc are shown below:

	<b>FRW Billion</b>	<b>FRW Billion</b>
Non-current assets	2,880	
Current assets	3,760	
	<b>6,640</b>	
Equity		
Share capital (Shares of FRW 100)		450
Retained Earnings		2,290
		<b>2,740</b>
Non-current liabilities		
10% Secured bonds repayable at par 2028		1,800
Current liabilities		2,100
<b>Total Equity and Liabilities</b>		<b>6,640</b>

Current share price FRW 500

Bond price (FRW 100) 105

Equity beta 1.2

BUTARE Plc proposes to finance the FRW 900 billion investments with a combination of debt and equity as follows:

- 1) FRW 390 billion in debt paying interest at 9.5% per annum, secured on the new premises and repayable in 2028.
- 2) FRW 510 billion in equity via a rights issue. A discount of 15% on the current share price is likely.



A marginally positive NPV of the proposed investment has been calculated using a discount rate of 15%.

This is the entity's cost of equity plus a small premium, a rate judged to reflect the risk of this venture. The Chief Executive of Butare Plc thinks this is too marginal and is doubtful whether the investment should go ahead. However, there is some disagreement among the directors about how this project was evaluated, particularly about the discount rate used.

**Director A:** Suggests the entity's current WACC is more appropriate.

**Director B:** Suggests calculating a discount rate using data from Kalisimbi Rwanda Plc a quoted entity, the main competitor in the new business area. Relevant data for this entity is as follows:

- 1) Shares in issue: FRW 600 billion with par value of FRW100, currently quoted at 560 FRW each
- 2) Debt outstanding: FRW 525 billion variable rate bank loan
- 3) Equity beta: 1.6

**Other relevant information**

- 1) The risk-free rate is estimated at 5% per annum and the return on the market is 12% per annum. These rates are not expected to change in the foreseeable future.
- 2) BUTARE Plc pays corporate tax at 30% and this rate is not expected to change in the foreseeable future.
- 3) Issue costs should be ignored.

**Required:**

- (a) Calculate the current WACC for BUTARE Plc (10 marks)
- (b) Calculate a project-specific cost of equity for the new investment (8 marks)
- (c) Discuss the views of the two directors (4 marks)
- (d) Discuss whether financial management theory suggests that BUTARE Plc can reduce its WACC to a minimum level. (3 marks)

**Total (25 marks)**



## QUESTION FOUR

TUZAMURANE Ltd is a toy manufacturing company. It manufactures Polly Playtime, the latest doll craze amongst young girls. The company is now at full production of the doll. The final accounts for year ended 31 March 2024 have just been published and are as follows. 2023's accounts are also shown for comparison purposes.

### Income Statement year-end 31 March

	2024	2023
	FRW'000	FRW '000
Sales	30,000	20,000
Cost of sales	20,000	11,000
Operating profit	10,000	9,000
Interest	450	400
Profit before tax	9,550	8,600
Tax	2,000	1,200
Profit after tax	7,550	7,400
Dividends	2,500	2,500
Retained profit	5,050	4,900

### Statement of Financial Position as at 31 March

	2024	2023
	FRW'000	FRW'000
Non-current assets	1,500	1,400
Current assets		
Inventory	7,350	3,000
Accounts receivable	10,000	6,000
Cash	2,500	4,500
	19,850	13,500
	21,350	14,900
Ordinary shares (25c)	5,000	5,000
Profit	6,450	1,400
8% bonds	1,200	3,500
Current liabilities		
Overdraft	2,000	-
Dividends owing	2,500	2,500
Trade accounts payable	4,200	2,500
	21,350	14,900



**Required:**

- a)**
- (i)** Based on relevant calculations of ratios and trends, **evaluate the performance of Tuzamurane Ltd over the last two years and identify the main problems facing Tuzamurane Ltd.** (10 marks)
  - (ii)** **Provide possible solutions to the problems identified in (i)** (4 marks)
  - (iii)** Business Managers are increasingly becoming indispensable in the daily management of businesses and the achievement of shareholders’ objectives. **Identify and describe three (3) approaches used to encourage business leaders to achieve shareholders’ objectives.** (3 Marks)
- b)** AHEZA plc is a Rwandan company with export and import trade with Kenya. The following transactions, in the currency specified, are due within the next six months:
- 1) Purchases of goods, cash payment due in three months FRW 116,000,000
  - 2) Sale of finished goods, cash receipt due in three months KES 197,000,000
  - 3) Purchase of goods, cash payment due in six months KES 447,000,000
  - 4) Data relating to exchange rates and interest rates are as follows:

<b>Exchange rates:</b>	<b>KES/FRW</b>
Spot	1.7106 – 1.7140
Three months forward	1.7024 – 1.7063
Six months forward	1.6967 – 1.7006

<b>Interest rates</b>	<b>Borrow</b>	<b>Deposit</b>
Rwandan Francs (FRW)	12.5%	9.5%
Kenyan Shilling (KES)	9.0%	6.0%

**Required:**

**Calculate the net FRW receipts/payments that AHEZA might expect for both its three-month and six-month transactions if the company hedges foreign exchange risk using (i) the forward market and (ii) the money market.** (8 marks)

**(Total: 25 Marks)**



**Present value interest factor of Fw1 per period at i% for n periods, PVIF(i,n).**

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026
25	0.780	0.610	0.478	0.375	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047	0.038	0.030	0.024	0.020	0.016	0.013	0.010
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033	0.026	0.020	0.015	0.012	0.009	0.007	0.005	0.004
35	0.706	0.500	0.355	0.253	0.181	0.130	0.094	0.068	0.049	0.036	0.026	0.019	0.014	0.010	0.008	0.006	0.004	0.003	0.002	0.002
40	0.672	0.453	0.307	0.208	0.142	0.097	0.067	0.046	0.032	0.022	0.015	0.011	0.008	0.005	0.004	0.003	0.002	0.001	0.001	0.001
50	0.608	0.372	0.228	0.141	0.087	0.054	0.034	0.021	0.013	0.009	0.005	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000



**Present value interest factor of an (ordinary) annuity of Frw1 per period at i% for n periods, PVIFA(i;n).**

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823	9.077	8.422	7.843	7.330	6.873	6.464	6.097	5.766	5.467	5.195	4.948
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.427	8.694	8.055	7.496	7.003	6.566	6.177	5.829	5.517	5.235	4.979
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.644	8.855	8.176	7.586	7.070	6.617	6.215	5.858	5.539	5.251	4.992
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.779	8.951	8.244	7.634	7.105	6.642	6.233	5.871	5.548	5.258	4.997
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.915	9.042	8.304	7.675	7.133	6.661	6.246	5.880	5.554	5.262	4.999



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