CERTIFIED PUBLIC ACCOUNTANTS

ADVANCED LEVEL 2 EXAMINATIONS

A2.1: STRATEGIC CORPORATE FINANCE

DATE: WEDNESDAY 28, AUGUST 2024

INSTRUCTIONS:

1. **Time Allowed:3hours 45 minutes** (15minutes reading and 3hours 30minutes writing).
2. This examination has **two** sections**: A &B.**
3. Section **A** has **one Compulsory Question** while section 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.

QUESTION ONE

UNGUKA Co Ltd, a multinational company based in Rwanda with Rwandan Francs (FRW) as the home currency, operates in different countries in the East African Community (EAC). It manufactures and distributes electronic devices within the region. UNGUKA is considering a major expansion in Uganda a neighbouring country through a subsidiary company (BIBAWO Co Ltd).

The company will require an initial investment of FRW 900 million to purchase a machine that will facilitate its operations. At the end of the fifth year the machine will be sold at FW 150 million. The working capital of FRW 500 million will be made immediately at the start of the first year and then increase at a rate of 5% per annum in the subsequent years. It will be released at the end of year 5. The cost of capital is 10 %.

Cash flow forecasts

Year	1	2	3	4	5
Units sold (Units)	500,000	620,000	750,000	820,000	800,000

Sales revenue per unit: KES 300 /Unit

Variable cost per unit: UGX 1,200 /Unit

Fixed cost per year: UGX 100,000,000

All electronic devices produced are exported to Kenya.

The inflation rate in Uganda is 5% per annum while the inflation rate in Kenya is 3%.

The corporate tax rate in Uganda is 40%. The tax is paid in the year that the liability of tax arises. Depreciation per annum is on a straight–line basis.

The operating profit is arrived at before deducting depreciation

The spot exchange rates

Ugandan Shillings per Francs	UGX 2.70/FRW1
Ugandan Shillings per Kenyan Shillings	UGX 27.90/KES1

Annual average future exchange rate forecast:

Year 1	2.79 UGX/FRW1	28.20 UGX/KES1
Year 2	2.81 UGX/FRW1	28.40 UGX/KES1
Year 3	2.83 UGX/FRW1	28.60 UGX/KES1
Year 4	2.85 UGX/FRW1	28.80 UGX/KES1
Year 5	2.87 UGX/FRW1	29.00 UGX/KES1

Assuming there were no transfer prices, interest costs and redundancy costs.

Assuming that inflation in Rwanda is not considered.

Assume there is no double tax relief between Rwanda and Uganda.

Required:

Prepare a report that:

a) **Calculates BIBAWO Co Ltd.'s cash flows in Ugandan shillings.** (21 Marks)

b) **Translates the cash flows calculated in a) above into Rwandan francs and advise whether UNGUKA CoLtd should proceed with the investment proposal using NPV technique.** (14 Marks)

c) **Highlights two risks that UNGUKA Co Ltd is likely to face while investing in international projects.** (2 Marks)

d) **Explains three methods that UNGUKA Co Ltd may consider to mitigate foreign exchange risks.** (3Marks)

e) **Differentiates between floating exchange rate and adjustable peg system.** (2 Marks)

f) **Discusses three foreign exchange risks exposed to UNGUKA Co Ltd.** (6 Marks)

g) **Distinguish between lagged payment and lead payment.** (2 Marks)

(Total: 50 Marks)

QUESTION TWO

Kagera Agri-Growers Ltd (KAGL) is a listed agricultural company that specializes in milling and processing of rice and maize for domestic and international markets. KAGL has an annual turnover of FRW 8.5 billion and a market capitalization of FRW 56 billion. It operates in all the districts of the Eastern Province and exports its products to other several countries in the region. Some shareholders believe that Corporate Social Responsibility (CSR) deviates the company's main financial goal of wealth maximization and therefore the firm does not owe the society any responsibilities. They even go ahead to say that the shareholders who are interested can take a portion of their wealth and do charitable activities as individuals not as a firm. Others argued that socially responsible activities can improve the reputation of the firm which in turn may lead to profit and wealth maximization. After a long argument amongst the shareholders, they had an understanding about benefit of CSR. They agreed to incorporate CSR objectives into the company's strategic planning process. A policy was formulated where 0.1% of their annual profit goes to corporate social responsibility activities. A committee was appointed to ensure that corporate social responsibility activities are implemented.

KAGL's community development program is to build schools and provide scholastic materials for the children of the poor farmers in the community for free. KAGL also intends to provide co-operative farmers with seeds, fertilizers, pesticides and train them on how to do irrigation to ensure increase in the production of maize and rice. For the employee welfare, KAGL has committed itself to pay its employees a reasonable salary, create favourable working conditions, contribute to their health insurances and enhance career development for well performing employees. KAGL has also devoted itself to help the community in construction of terraces to reduce soil erosion, use technologies that are eco-friendly and participate in planting trees. KAGL's aims at producing quality products (maize and rice) and selling them at an affordable price to the community.

Despite these, the local communities have protested and vowed to boycott their products expressing their annoyance because of the following reasons; the company employs school children during harvesting time and this has led to high rate of drop outs, pollution of the environment as result of desire for massive production of the maize and rice, the company has evicted some of the residents from their land at an un fair compensation, the water and wastes from the factory has attracted mosquitoes in the vicinity hence causing malaria, and suppliers of rice and maize are exploited in a way that the prices offered to them are way too low in relation to prices it sells its products. The local suppliers therefore believe that the company has made huge profits at their expense.

Iwacu Super Rice Company Ltd

Ms. Ingabire is an entrepreneur who has a Master's degree in Agri Business with vast skills in business management and entrepreneurship. She wants to venture into business and is considering starting up a rice milling and processing company with other investors. These other investors are expected to have 35% of the shares of the company. They intend to call the company Iwacu Super Rice Company Ltd (ISRCL) and product name will be Iwacu Super Rice. The company's location is in Gatsibo District in the Eastern Province. The mission of ISRCL is to provide customers with super quality rice at a reasonable and affordable price.

ISRCL is expected to face tough competition in the market and its competitors are Mugire Rice Company Ltd., Mulefu and Sons Rice Producers Ltd. and Mulokore Rice Producers and Suppliers Ltd. The company's competitive advantage is packaging in environmentally friendly packets, online business and delivery services to be able to beat its competitors who have enjoyed the market for more than a decade. ISRCL's target market are the restaurants, schools, supermarkets, distributors as well as low – income and medium – income individuals.

They expect to employ 25 people and these will be under the leadership the Company's Managing Director, Finance Director, Operations Director and Human Resources Director. It will have 9 members of the board of directors who vast experience in different fields.

The sales forecasts are FRW 100 million for the first year which will increase at 10% in the second year and at 15%, 20% and 14% in the third, fourth and fifth years respectively. Costs (Operational and other costs) for year 1 will be FRW 36 million, year 2 FRW 40 million, year 3 FRW 47 million, year 4 FRW 55 million and year 5 FRW 68 million. Net Profit for Year 1 will be 32 million, year 2 FRW 40 million, year 3 FRW 46 million, year 4 FRW 60 million and year 5 FRW 77 million. The company expects to achieve its break – even point at the end of the first year.

The company will require an initial amount of FRW 150 billion. The shareholders will contribute 60% of this capital and the remaining 40% will be borrowed from the bank. Ms. Ingabire has been requested by the bank to provide them with a business plan showing how the company will operation in the next five years.

Required:

a) **Highlight five corporate social responsibility activities that the company expects to employ and identify five corporate social responsibility issues it faces.** (10 Marks)

b) An investor was interested in purchasing some of the shares of KAGL based on its stock price at the market. He believes that the stock price reflects all the information regarding the performance of the company that would enable him to invest its shares. **Explain to the investor three types of efficient market hypothesis and discuss one form of information efficiency.** (7 Marks)

c) **Prepare a business plan for Iwacu Super Rice highlighting the key features that the bank would consider relevant for funding.** (8 Marks)

(Total: 25 Marks)

QUESTION THREE

Berwa Company Limited (BCL) is a Rwandan company dealing with the manufacture of fertilizers. BCL is currently proposing the purchase a new machine for the production of a fertilizer known as TUBURA. The machine would require a capital expenditure of FRW 50,000,000 (net of costs of issue) which will generate a before tax cash flow of FRW 350,000 in the first year. This cash flow will be increasing at 5 % per year for 3 years. At the end of the machine's four-year life, its realizable value will be FRW 20,000,000 (net any tax effects). The corporate income tax is 30% and is payable one year in arrears. The machine will attract a capital allowance of 25% on a reducing balance basis. The company's equity beta is 1.20 while its debt beta is 0.30 and its debt-to-equity ratio being is 20:80. Similar firms involved in the manufacture of fertilizers have an average equity beta of 1.30, average debt beta of 0.35 and an average debt-to-equity ratio of 25:75.

The debt is risk free at the rate of 8% while the required rate of return from the market portfolio is 10%.

The new investment proposal will be financed as: Debt 40% and Equity 60%. The issue costs on gross equity issued are 4% and 3% on the gross debt issued.

Required:

a) Using the Adjusted Present Value appraisal method, **advise the Management of BCL on the proposal provided in the case above.** (17 Marks)

b) **Highlight three advantages of Net Present Value and three limitations of Adjusted Present Value in appraising investment projects.** (6 Marks)

c) **You have been asked by the Management of BCL to differentiate between Adjusted Present Value and Net Present Value.** (2 Marks)

(Total: 25 Marks)

QUESTION FOUR

Acquisition Proposal

Isonga Limited (IL), is a listed company specializing in the manufacture of leather products for more than two decades. It produces a variety of products such as bags, shoes, belts, carpets, wallets, gloves and cushions. They are seeking to use advance technology in producing and designing such products. ML’s cutting–edge technology has attracted the attention of the Directors of IL. IL is considering acquiring ML with a belief that it will use its technology to expand and be able to compete with similar companies in the market. The company’s performance in the past years has been dwindling. The shares of MLis15 million priced at FRW 10.50 each. ML’s market value of beta is 1.54. The risk-free rate is 10% and the market required rate of return is 12%. The Directors of IL have projected the performance of ML for the next five years based on the post–merger cash flows as follows:

Projected Post–Merger Cash Flows as of December 31 **(FRW “000”)**					
	2025	**2026**	**2027**	**2028**	**2029**
Sales Revenue	102,000				
Selling and Administration expenses	12,000	13,000	14,000	16,000	19,000
Depreciation	7,000				
Interest expenses	5,000	6,000	7,000	8,000	8,000

Other information:

1. The Finance Director has projected the sales revenue to grow at 10 % per year for the next four years.
2. Variable costs are 40 % of the sales revenue
3. Fixed costs will be 15 % of the sale revenue
4. Depreciation is expected to increase by 10% per annum
5. The operating profit was arrived at before deducting depreciation
6. ML is expected to grow by 10% per annual to perpetuity after the fifth year.
7. ML will retain an amount equivalent to FRW 20,000 for internal expansion for first two years and FRW 15,000 for the rest of the years
8. Corporate tax rate is 30%

The relation between managers and shareholders

One of the theories that have been pointed to explain why acquisitions fail at a high rate is agency theory. Shareholders of the target firms believe that the acquisition is in the interest of the managers of the acquiring firms. The shareholders of IL believe that the acquisition of ML will enhance the value of the company through expansion of the market, improvement in sales revenue and reduction of costs. The management of ML may act in the interests of their shareholders by taking defensive measures to protect their company to resist t the acquisition. This might be done by maximizing the sale price of the company. You as an expert have identified a possibility of agency problem between the principal (acquiring firm) and the agent (target firm)

Required:

a) **You have been approached by the Directors of ML to advise them on the maximum amount that they would acquire IL.** (20 Marks)
b) **Explain to the shareholders of ML the concept of agency theory and discuss to them two causes and two solutions of agency problem.** (5 Marks)

(Total: 25 Marks)

End of Question Paper

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Present value interest factor of Frw1 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%
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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
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
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
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
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
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
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