

CERTIFIED PUBLIC ACCOUNTANT

ADVANCED LEVEL 2 EXAMINATIONS

A2.1: STRATEGIC CORPORATE FINANCE

DATE: WEDNESDAY 28, FEBRUARY 2024

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. In summary attempt **three questions**.
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

Musanze Logistics (ML)

ML is a transportation company listed at the stock market that has in the recent past seen a massive decline on its profitability with dividend payment taking a nose dive. Shareholders are up in arms and threatening to walk out

At the last Annual General Meeting, a heated argument arose between shareholders and management after the current years declared dividend were far below their expectation, in the past financial years, the company had paid much higher dividends

“The only objective of this company is to maximize my wealth”, a major shareholder protested angrily

“We work in the best of shareholders and of the company at large”, was the reply from management

ML Management is therefore under pressure to improve performance and are reviewing two possible alternatives,

1. Expansion through acquisition and
2. Diversification by developing a new product

Information for Option 1 - Acquisition

ML is to acquire a company in the same industry with an objective of warding off competition and becoming the market leader, with this strategy, they hope to achieve premium pricing advantages

They have identified Remera, a listed company as a candidate for possible acquisition

Below is the financial information of Remera for year ended 31st December 2023:

- Current share price of Remera is FRW 71 with issued ordinary shares of 70 million.
- The realizable value of Remera’s assets, net of all debt repayments, is estimated to be FRW 3,820 million.
- The PE ratios of Remera’s quoted competitors in the industry is 12.5:1
- Cash flow projection

Extract statement of profit or loss for the year ended 31st December 2023

Particulars	FRW "millions"
Turnover	4,800
Profits before tax (after interest payments)	528
Taxation	158.4

Extract statement financial position

Financial years	FRW" millions"			
	202 4 <u>0</u>	202 5 <u>1</u>	202 6 <u>2</u>	202 7 <u>3</u>
Net sales	4,100	4,300	4,910	4,800
Cost of sales	2,460	2,580	2,946	2,880
Sales and Administration expenses	120	150	100	250
Allowable tax depreciation	600	630	630	630
Interest	280	260	280	120
Cash flow for future growth and asset replacement	300	200	150	240

Additional information:

1. Taxation is at the rate of 30%, payable in the year that the taxable cash flow arises.
2. The risk-free rate is 9% and market return 18% per year.
3. Current equity beta of Remera is 1.2
4. Post-takeover cash flows of Remera (after replacement and growth expenditure) are expected to grow at 6% per year after 202~~7~~3.

Information for Option 2 – Product development

The following information are projections of financial implications for product development

Sales forecast information

Year	1	2	3	4
Sales volume (units)	600,000	850,000	1,270,000	580,000
Selling prices per unit	21	25	24	20
Fixed Costs	1,810,000	2,015,000	2,125,000	2,100,000

Additional information:

1. Initial cost of plant and machinery ~~will be~~ ~~was~~ FRW 240 million payable at the start of the first year.
2. Fixed costs are given in money value.
3. Inflation relating to sales prices is 7.5% and purchase cost prices is 9%.
4. Averages cost per unit is FRW12 in current prices.
5. Scrap value at the end of year four will be FRW 40 million in nominal value.
6. Tax is at of 30% payable one year in arrears.
7. Allowable depreciation at 25% on a reducing balance basis.
8. Nominal after-tax weighted average cost of capital of 18%.

9. Real after-tax weighted average cost of capital of 12%.

Required:

(a) Comment on statement made by the shareholder and the management. (6 Marks)

(b) State and briefly explain two ways by which management can be encouraged to achieve the objective of maximization of the shareholders wealth. (6 Marks)

(c) ML option 1,

Calculate price or range of prices that ML should offer to purchase the shares of Remera. (16 Marks)

(d) ML Option 2,

(i) Calculate the net present value of the investment project and comment on its financial acceptability. (9 Marks)

(ii) Discuss three methods how risk can be considered in the investment appraisal process. (3 Marks)

(e) An analyst has presented the following public information to the CEO of ML claiming that shares of ML are overvalued by up to 10%.

- Current market share price is FRW 645.
- Cost of equity is estimated at 12.5%.
- Annual dividend growth has been 8% during the same periods presented in the trend below.
- Historical trend of dividends per share.

Year	2020	2021	2022	2023
Dividend per share	19.86	21.45	23.17	25.02

Required:

Using above information, give an estimated market price of shares and comment of efficiency of the above market and alternative methods of they could have used to evaluate. (10 Marks)

(Total: 50 Marks)

SECTION B

QUESTION TWO

Mutesi who works under you as a Junior Finance Consultant has approached you with several issues that need clarification.

(a) Issue number 1:

Mutesi has been asked to make a detailed presentation of financial performance of Dodola Limited based of specific performance indicators. She will also analyze performance of Dodola in relation to its closest competitor.

Mutesi is aware that sectorial analysis is important but has reservations on their usefulness.

Required:

Discuss 3 limitations why using industrial or sector ratios when making a financial performance evaluation of a company may not be useful (6 Marks)

(b) Issue number 2:

Mutesi was handed information below by one of your investment's clients

Extract of profit of loss account

	FRW "000"
Profit for the period	36
Dividends	6
Retained profit for the period	30

Extract of statement of financial position

Number of shares	300,000
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A proposal has been put forward by management to increase dividend paid by 20%, claiming that this will make the company more attractive to investors and drive-up shares prices.

Required:

Critically discuss the above proposal (7 Marks)

(c) Issue number 3:

Dodola limited, one of your corporate clients asked Mutesi to calculate WACC to be used in project evaluation, Mutesi has made such a calculation before in her studies

Number of ordinary shares	480 million
Tax rate applicable	30%
Market prices ordinary shares	FRW 145
Market prices convertible debt, 7%	FRW 107 for every FRW 100
Equity beta	1.6
Risk free return	10.4%

Market return	16%
Convertible debt, par valuation	FRW 360 million
Bank loan, 8%	FRW 200 million

- Dodola share prices are expected to rise at the rate of 2% per year.
- Convertible bond can be redeemed in 4 years' time at a premium of 20% of their current market value or be converted into ordinary shares at the rate of 1 for every 1 bond of FRW100

Required:

Calculate Weighted Average Cost of Capital, WACC and advise on the project appraisal.
(8 Marks)

(d) Issue number 4:

Mutesi has been asked to give a presentation on project finance and its associated risk to Dodola limited.

Required:

Briefly explain to Mutesi what is project finance and any two risks associated with project finance.

(4 Marks)

(Total: 25 Marks)

QUESTION THREE

Uwamaliya plc (Uwamaliya)

(a) One of the main objectives of corporate financial management is to ensure the company grows wealth of its shareholders. To this extent, companies go into greater detail to have an optimal capital structure that minimizes discount rates which is a used in wealth valuation.

Required:

Discuss whether Uwamaliya can use pecking order form of capital structure to achieve the above objective. (5 Marks)

(b) Currently Uwamaliya is developing a new product for a new market. So far market research is giving a positive indication that the product will be profitable since it is one of its kind in that market.

Management will have to invest in plant and machineries at a cost of FRW 70,000 million. However, being a fast-moving consumer product, they will evaluate its profitability on a four-year time horizon.

They are optimistic that 300 million units will be sold each year at a constant selling price of FRW 720 per unit and produced at a variable cost of FRW 465 per unit, fixed costs are estimated at FRW10,000 million. All machines shall be scrapped at the end of year four

Current WACC is 12% with debt equity ratio of 40%, with equity beta factor of 1.2.

Cost of equity is 14% and debt is at 9%.

Similar companies in the related industry have the following structure:

Average WACC 16%

Debt to equity ratio 60%

Equity beta factor 1.9

Other information

Risk free rate is 10% and market premium is 7%

Required:

Calculate Net Present Value and advice on the project's viability. (10 Marks)

(c) Uwamalya is considering another project that will earn FRW 150 million in perpetuity. It will require initial capital outlay of FRW 1,000 million. Uwamaliya is unsure how best to restructure capital for this project, all earnings will be paid out to the providers either as interest or dividends

The CFO has put forward possible capital structure plans as follows:

1. 100% equity funding
2. 50% equity and 50% debt – 6% interest
3. 30% equity and 70% debt – 10% interest

Required:

Advice on which capital structure to employ.

(5 Marks)

(d) Main reason why Uwamaliya wants to develop new product is because it is currently trading in a mature declining industry and unless drastic steps are taken, the company may soon fail and go out of business all together

Management of Umamaliya have heard that there are several methods of predicting corporate failure and one commonly used is the SO model that uses a combination of financial ratios to attempt to predict failure

SO produces a score based on the following equation

$$SO = 3,5S1 + 1,8S2 + 0,25S3 + 0,69S4$$

Where:

S1 = Earnings before interest and tax/market value of equity

S2 = Working capital/medium- and long-term capital employed

S3 = Market value of equity/market value of debt

S4 = The present value to infinity of current operating free cash flow/turnover

According to the SO system a company scoring less than 1 has a high probability of failure; a score of 1–2 suggests remedial action is necessary to improve corporate financial performance; and a score of over 2 means that a company has a high probability of survival for at least three years, which is the maximum claimed prediction period for the model.

Uwamaliya has provided you with the following data to assist in prediction failure

Earnings before interest and tax	82
Market value of equity	432
Working capital	(20)
Medium- and long-term capital employed	605
The present value to infinity of current operating free cash flow/turnover	401
Market value of debt	348
Turn over	809

Required:

Using the above formula and data provided, **predict if Uwamaliya will fail and give any two reasons why such models may not be relied upon in predicting failure.**

(5 Marks)

(Total: 25 Marks)

Present value interest factor of FRW1 per period at i% for n periods, PVIF(i,n)

Period	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
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065

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%
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

