



CERTIFIED PUBLIC ACCOUNTANT
ADVANCED LEVEL II EXAMINATION
A2.1: STRATEGY CORPORATE FINANCE
DATE: FEBRUARY 2025
MARKING GUIDE AND MODEL ANSWERS

QUESTION ONE

Marking Guide

Q1	Criteria	Marks
a)	Award 2 Marks for each of 3 correct discussion of merger failure	6
b)	Award 2 Marks for each of the ethical consideration of mergers and acquisition	6
c)	Award 1 Mark for each of 7 correct computations of financial ratios	7
	Award 1 Mark for each of 7 interpretations of ratios computed	7
	Award 1 mark for general comment inline to the calculation made	1
	Maximum marks	15
d)(i)	Award :1 Mark for explaining the meaning of capital rationing	1
	:1 Mark for each of 4 ways of handling capital rationing	4
	:0.5 Marks for each correct computation of contribution	2.5
ii)	:0.5 Marks for each correct computation of after-tax cash flows	2.5
	:0.5 Marks for each correct computation of profitability index	2.5
	:1 Mark for the correct ranking	1
	:0.5 Marks for advice on capital rationing	1.5
	Maximum Marks	15
e)(i) ii)	Award 2 marks for correct explanation of Dividend Irrelevant Theory	2
	Explanation of Modigliani and Miller Model in relation to dividend payment	2
	Award 1 Mark for stating the M – M assumptions (1 Mark * 4 assumptions)	4
	Maximum Marks	8

MODEL ANSWERS

a) Three reasons for failed mergers and acquisition.

i) Poor strategic fit

Shami ltd and power max have strategies and objectives that are too different and that conflict with each other hence leading to separation among the two companies

ii) Cultural and Social Differences

It has been evidenced early that Shami and power max have had wide differences in cultures, then synergy values can be very elusive.

iii) Incomplete and Inadequate Due Diligence

Due diligence is the “watchdog” within the mergers and acquisition process. If you fail to let the watchdog do his job, you are in for some serious problems within the mergers and acquisition process.

iv) Poorly managed integration

The integration of two companies requires a very high level of quality management. In the words of one CEO, “give me some people who know the drill. Integration is often poorly managed with little planning and design. As a result, implementation fails.

v) Paying too much

In today’s merger frenzy world, it is not unusual for the acquiring company to pay a premium for the Target Company. Premiums are paid based on expectations of synergies.

However, if synergies are not realized, then the premium paid to acquire the target is never recouped.

vi) Overly optimistic

If the acquiring company is too optimistic in its projections about the Target Company, then bad decisions will be made within the mergers and acquisition Process. An overly optimistic forecast or conclusion about a critical issue can lead to a failed merger.

b) Ethical considerations

i) Employee Rights and Job Security

- **Issue:** Mergers often lead to **layoffs, salary reductions, and changes in workplace culture**. Employees may face uncertainty about their roles, which can lead to stress and job insecurity.
- **Ethical Consideration:** Companies should provide **fair severance packages, clear communication, and retraining opportunities** for affected employees.

ii) Transparency and Fair Dealings with Stakeholders

- **Issue:** Sometimes, companies **hide financial risks or overstate benefits** of an M&A deal to shareholders, regulators, or the public. This lack of transparency can lead to financial losses and mistrust.
- **Ethical Consideration:** Businesses should conduct **honest due diligence** and disclose **all financial and operational risks** to investors and employees.

iii) Monopoly and Consumer Impact

- **Issue:** Mergers can **reduce competition**, leading to **higher prices, lower product quality, or unfair market dominance**. This can harm consumers and smaller competitors.
- **Ethical Consideration:** Companies should ensure that their M&A strategy does not **violate antitrust laws** or unfairly disadvantage consumers and competitors.

iv) Insider dealing

v) Use of price-sensitive information

vi) Any incentives offered to ensure the bid is accepted (e.g. seats on the board of the bidding company; enhanced salaries, bonuses)

c) Financial health of Sandaline – Computation of ratios

Financial health analysis						
Ratios	Formulae		2023		2022	Industrial
i) Return before interest and tax on long term capital employed	EBIT/Capital employed *100	900/5825 *100	15.4%	4800/5657.5*100	85%	24%
ii) Return after tax on equity	Profit after tax/equity*100	190/5025 *100	4%	3010/4657.5*100	65%	16%
iii) Operating profit as a percentage on sale	Operating profit/sale*100	900/7,000 *100	13%	4800/12000 *100	40%	11%
iv) Current ratio	Current asset/Current liabilities:1	2157/232	9.30:1	2014/312	6.5:1	1.6:1
v) Total debt/equity	Debt/Equity*100	800/5025 *100	16%	1000/4657.5	21%	24%
vi) Dividend cover	Profits after tax/Dividend paid	190/122.5	1.6 Times	3010/752.5	4 Times	4 Times
vii) Interest cover	Profit before interest and tax/interest	900/500	1.8 Times	4800/500	9.6 Times	4.5 Times

Interpretation

i) Return on capital employed

This ratio measures return to investors, 85% in the year 2022 which dropped to 15.4 % in the year 2023 signifying profitability drops but the company is doing well than the industry with a ratio of 24%. This has caused by increased in operating cost in the year 2023, to solve this issue the company should implement proper inventory controls

ii) Return after tax on equity

This ratio has drop from 65% in the year 2022 to 4% in the year 2023 this decline may have caused by an increase in the operating cost in the year 2023. The industrial ratio is 16% to mean this company is performing below its competitors, to control this problem the company should ensure no wastages and in efficiency in operation is control

iii) Operating profit as percentage of sales (%)

The company has a decrease in the ratio from 40% in the year 2022 to 13 % in the year 2023. This decrease has been caused by a decrease in sales. The company should increase sales volume, venture into new markets and improving advertising campaign.

iv) Current ratio

The company has a ratio of 6.46:1 in the year 2022 and increased to 9.30:1 in the year 2023. This shows that the company is more liquid than the industry which is at 1.6:1. The cause of the increase in current ratio is as a result of increased inventory and reduction on current liabilities. The company should develop a good inventory management that will enable them to hold an optimal stock.

v) Total debt/ Equity (gearing) (%)

The leverage ratio has drop from 21 % to 16% which means the company has to repay some debt worth FRW 200 million. The company is better than the industry which has 24% gearing level.

vi) Dividend cover (times)

The dividend cover measures how many times dividend can be paid from the profit attributable to shareholders. The company coverage ratio has reduced from 4 times in the year 2022 to 1.6 times in the year 2023. This has decreased compared the industry value of 4 times. This was caused by a decline in profits.

vii) Interest cover (times)

This ratio measures for number of times interest can be paid from current operating profits. There is a decrease in this ratio from 9.6 times in the year 2022 to 1.8 times in the year 2023, even though the company has a decline in this ratio which still operated above the industry ratio of 4.5 times. The reason for this decline is an increase in operating cost.

Comment

The company is doing better than the industrial ratios in current ratio, gearing ratio and operating profit as sales ratio. Interest cover, dividend cover, return after tax on equity and return on capital employed ratios were below the industry.

d) Capital Rationing

i) Capital Rationing is a situation where a company has insufficient capital to complete all projects which it would like to undertake (e.g. those with a positive NPV).

POSSIBLE WAYS OF SOLVING CAPITAL RATIONING

- Defer one or more projects to a later period when capital is not rationed
- Share project(s) with another partner
- Outsource part of a project (e.g. component)
- Consider licensing/franchising
- Seek alternative sources of funding (e.g. venture capital, sale & leaseback)

ii) Computation profitability index and advice

	Alpha	Beta	Gamma	Lambda	Vega
Revenue	50	74	30	20	46
Less: Variable cost (40% of Revenue)	20	29.6	12	8	18.4
Contribution	30	44.4	18	12	27.6
Less: Fixed Operating Cost	-10	-18	-4	-8	-11
Profit before tax	20	26.4	14	4	16.6
Less: Tax 30%	6	7.92	4.2	1.2	4.98
Depreciation tax benefit 30%	3.6	4	1.35	1.875	1.875
Profit after tax	17.6	22.48	11.15	4.675	13.495
PVIFA (12%)	3.605	4.111	5.650	3.037	4.968
Total Present Value	63.448	92.41528	62.9975	14.19798	67.04316
Less: Capital Outlay	60	80	45	25	50
Net Present Value	3.448	12.41528	17.9975	-10.802	17.04316
Capital Outlay	60	80	45	25	50
Profitability Index	0.057467	0.155191	0.399944	-0.43208	0.340863
Ranking	4	3	1	5	2

Capital allowances/depreciation tax shield				
Investment projects	Capital outlay	Useful life	Depreciation	Tax shield
Alpha	60	5	12	3.6
Beta	80	6	13	4
Gamma	45	10	4.5	1.35
Lambda	25	4	6.25	1.875
Vega	50	8	6.25	1.875

Capital rationing for advice

Projects	Capital outlay
Gamma	45
Vega	50
Beta	5
Total capital	100

e

i) Meaning of Dividend Irrelevant Theory

According to Modigliani and Miller (M – M) theory of dividend irrelevancy, a company's dividend policy has no bearing on its value or cost of capital in a perfect market, it argues that investors do not care whether a company pays dividend or keeps it earning for reinvestment and a company's value is derived from its earning potential and investment opportunities rather than how it distributes its earning. Any impact that dividend payments have on shareholders wealth can be counted by either buying or selling share if are excessively high or low.

ii) Explanation of Modigliani and Miller (M – M) Model in relation to dividend payment

The theory asserts that a firm's dividend policy has no effect on its market value and cost of capital.

M - M dividend policy is a passive residue determined by the firm's need for investment funds. It does not matter how the earnings are divided between dividend payment to shareholders and retention. Therefore, optimal dividend policy does not exist. Since when investment decisions of the firms are given, dividend decision is a mere detail without any effect on the value of the firm.

They base on their arguments on the following assumptions:

- No corporate or personal taxes
- No transaction cost associated with share floatation
- A firm has an investment policy which is independent of its dividend policy (a fixed investment policy)
- Efficient market – all investors have same set of information regarding the future of the firm
- No uncertainty – all investors make decisions using the same discounting rate at all-time i.e. Required rate of return (r) = cost of capital (k)

QUESTION TWO

Marking scheme

Q2	Criteria	Marks
a) (i)	Award 1 Mark for each of 2 requirements for listing at RSE correct	2
(ii)	Award 1 Marks for each of 2 benefits and 3 demerits of going to public by a company	5
	Maximum marks	7
b)	Award 2 Marks for each of 3 advantages of good corporate practice	6
c)	Award 1 Mark for formula of ex-price	1
	1 Mark for computation of ex-price	1
c)	1 Mark for formula of the theoretical value	1
	1 Mark for computation of the theoretical value	1
d)	0.5 Marks for formula of PV and 0.5 Marks for Ke formula	1
	1 Mark for correct computations of cost of equity	1
	1 Mark for correct computed of NPV per share	1
e)	1 Mark for computing interest savings	1
	1 Mark for computing of net savings	1
	1 Mark for calculating present value	1
	1 Mark for calculating net present value per share	1
	1 Mmark for calculating cum - right MPS	1
f)	Maximum marks	12
	Total marks	25

Model answers

a)

i) Requirements for listing at Rwanda security exchange

1. Minimum share capital: Mugisha ltd needs to have a minimum share capital as specified by Rwandan Stock Exchange ensuring company has a solid financial foundation
2. Financial statements: The Company must provide audited financial statement for at least past 3 years showing a track record of financial stability and transparency
3. Corporate governance: Mugisha ltd must adhere to stringent corporate governance standards including a well-structured board of directors, clear policies and compliances with regulation requirements.
4. Public float: The Company must ensure that a minimum percentage of its shares is available for public trading enhancing liquidity and investors access.
5. Profitability: Mugisha ltd needs to demonstrate consistent profitability or have strong business plan if it is in high growth sector assuring investors of its potential for sustainable growth.
6. Documentation: The application should include an information of memorandum, letter of no objection from the applicant regulator and other necessary documents.
7. Company structures: The applicant must be a public company limited by shares and registered under Rwandan laws

ii) Benefits of going public by Mugisha ltd

1. Access to capital: listing on Rwanda stock exchange provide company with wide access to pool of capital. This can be used to finance expansion of the firm
2. Enhance visibility and prestige: Listing on RSE improves a company reputation and credibility. This will increase trust in customers
3. Liquidity for shareholders: It provides easier way of buying and selling share by shareholders. This can be particularly attractive for early investors and employees who hold stock option

Demerits

1. Regulatory compliance: the company must ensure that at all time they follow the regulation and requirements to the latter failure to they risk been banned from listing
2. Loss of control: This arises when new shareholders buy shares because the shares are available to everyone who wish to buy hence existing shareholders lacks the power to stop selling of share which finally dilute their ownership.

3. Market pressure: Public companies are subjected to market pressure and investors expectation which can lead to a focus on short term results rather than long terms strategic goals.
4. Market Price: The market determines the price and the greater accountability to shareholders that come with it concerning the company's performance may not be liked by the management.
5. Take – over possibility: There will be a greater likelihood of being the subject of a take - over bid and it may be difficult to defend with wide share ownership.
6. The cost of obtaining a quotation is high.

b) Advantages of a good corporate governance

- i) Enhance trust and confidence: Effective governance improves trust and confidences among investors stakeholders and the public which is critical for companies' reputation
- ii) Improve risk management: Strong governance helps to identify, assess and mitigates the risk more effectively and resilience in a volatile market.
- iii) Ensure compliance: It ensures that company complies with legal and regulatory requirements reducing the risk of legal penalties and protecting companies' integrity.
- iv) Boost financial performance: Companies with good governance structure tend to perform better financially as they are better managed, more transparent and attractive to the investor.
- v) Promote accountability: Clear governance structure and processes promote accountability and responsibility among directors leading to better decision marking.
- vi) It leads to enhanced corporate image.

c) Computation of theoretical ex – price of shares

Number of rights = 5

5 shares @ FRW 500 per share = FRW 2,500

1 share @ FRW 400 per share = FRW 400

6 shares = FRW 2,900

Ex - price = Total value / total number of shares

Ex - price = FRW 2,900 / 6 shares = FRW 483.3 per share

d) Calculation of theoretical value

Theoretical value of right = cum – right MPS – Theoretical ex - price

Theoretical value of right = FRW 500 per share - FRW 483.3 per share = FRW 16.67 per share

e) Net present Value of additional benefit in Mugisha Ltd financial performance after the right issue.

PV per share = $A/(r - g)$ where A is annuity = FRW 9,450,000, r is cost of equity =? g is growth rate = 5%

$$K_e = \frac{D_0(1+g)}{P_0} + g \quad D_0 = 45, \quad g = 5\%, \quad P_0 \text{ is FRW } 500$$

$$\text{Cost of equity, } K_e = \frac{45(1+0.05)}{500} + 0.05 = 14.45\%$$

$$PV = \text{FRW } 9,450,000 / (0.1445 - 0.0500)$$

$$PV = \text{FRW } 9,450,000 / 0.0945 = \text{FRW } 100,000,000$$

$$\text{NPV} = (\text{FRW } 100,000,000 - \text{FRW } 80,000,000) = \text{FRW } 20,000,000$$

$$\text{NPV Per share} = \text{FRW } 20,000,000 / 1,000,000 \text{ Shares} = \text{FRW } 20 \text{ per share.}$$

f) Cum – right price per share if new funds are used

Cum – right market price = before right market price + NPV per share

Cash flows	FRW
Interest savings (80,000,000 * 10%)	8,000,000
Less: tax in savings (8,000,000 * 0.30)	2,400,000
Net savings	5,600,000

PV per share

$$\text{Present Value} = \text{FRW } 5,600,000 / 0.1445 = \text{FRW } 38,754,325$$

$$\text{NPV per share} = (\text{FRW } 38,754,325 - \text{FRW } 80,000,000) / 1,000,000 \text{ shares} = \text{FRW } (41.25) \text{ per share.}$$

Cum – right market price = before right market price + NPV per share

$$\text{Cum – right market price} = \text{FRW } 500 \text{ per share} + \text{FRW } (41.25) \text{ per share} = \text{FRW } 458.75 \text{ per share.}$$

QUESTION THREE

Marking Guide:

Calculation of expected returns	Marks
a) Calculation of expected return for each asset (0.5 Marks each)	1
1 Mark for portfolio return	1
Maximum Marks	2
(b) Calculation of variance of each asset (2 Marks each)	4
Calculation of standard deviation of each asset (1 Marks each)	2
Formula of portfolio risk	1
Calculation of portfolio risk	1
Maximum Marks	8
(c) Award 1Mark for each risk explained	3
(d) Option 1	
Award 1 Mark for calculation of current trade receivables	1
Award 1 Mark for calculation of discount taken	1
Award 1 Mark for calculation of finance savings on trade receivables	1
Award 1 Mark for calculation of decrease in bad debts	1
Award 1 Mark for calculation of savings in administration costs	1
Award 1 Mark for calculation of cost of discount	1
Award 1 Mark for calculation of net benefit	1
Option 2	
Award 0.5 Marks for calculation of reduction in trade receivables	0.5
Award 0.5 Marks for calculation of reduction in financing cost	0.5
Award 1 Mark for calculation of decrease in bad debts	1
Award 1 Mark for calculation of increased cost of 80 per cent advance	1
Award 1 Mark for calculation of net benefit	1
Award 1 Mark for conclusion	1
Maximum Marks	12
Total Marks	25

Model Answer:

a) Calculation of expected return for each security

Expected return = return * probability

Security A, Expected return = $[(30\% * 0.3) + (25\% * 0.4) + (20\% * 0.3)] = 25\%$

Security B, Expected return = $[(50\% * 0.2) + (30\% * 0.6) + (10\% * 0.2)] = 30\%$

Portfolio return

Portfolio return = [expected return (A)* proportion (A) + expected return (B)* proportion (B)]

Portfolio return = $[25\% * 40\% + 30\% * 60\%] = 28\%$

b) Calculation of expected risk for each security

Expected risk for security A = $\sqrt{0.3(0.30 - 0.25)^2 + 0.4(0.25 - 0.25)^2 + 0.3(0.20 - 0.25)^2} = 3.87\%$

Or in a tabular format for security A

State of economy	Probability P	Return on Security A	Expected return E(rA)	[Return A- E(rA)]	[Return A- E(rA)] ²	Prob*[Return A- E(rA)] ²
		(%)	Prob*Return			
1	0.3	0.3	0.09	0.05	0.0025	0.00075
2	0.4	0.25	0.1	0	0	0
3	0.3	0.2	0.06	-0.05	0.0025	0.00075
			0.25			Variance =0.0015
						Standard deviation = 0.0387

Expected risk for security B = $\sqrt{0.2(0.50 - 0.30)^2 + 0.6(0.30 - 0.30)^2 + 0.2(0.10 - 0.30)^2} = 12.65\%$

Or in a tabular format for security B

State of economy	Probability P	Return on Security B	Expected return E(rB)	[Return B- E(rB)]	[Return B- E(rB)] ²	Prob*[Return B- E(rB)] ²
		(%)	Prob*Return			
1	0.2	0.5	0.10	0.20	0.04	0.0080

2	0.6	0.3	0.18	0.00	0.00	0.0000
3	0.2	0.1	0.02	-0.20	0.04	0.0080
			0.30			0.016
						0.12649

Computation of portfolio risk

$$\text{Portfolio risk} = \sqrt{((W_A)^2(SD_A)^2) + ((W_B)^2(SD_B)^2) + (2 * W_A * W_B * R(A, B) * SD_A * SD_B)}$$

=

$$\sqrt{((0.60)^2(3.87)^2) + ((0.40)^2(12.65)^2) + (2 * 0.60 * 0.40 * 0.95 * 3.87 * 12.65)} = 9.07\%$$

Where:

E(rA) is Expected return of A

E(rB) is Expected return of B

E(rP) is Expected return of portfolio

R(A, B) is the coefficient of correlation between A and B

SDA is the standard deviation of A

SDB is the standard deviation of B

RA is the return of A

RB is the return of B

Pr is the probability

(c) Explanation for existence of risks

The risk may continue to exist even if there in diversified portfolio because they are some risks that are beyond the investor's control. Below are some examples of such risks:

1. Market Risk: This refers to the overall fluctuations in the stock market due to factors like investor sentiment, economic conditions, or geopolitical events.

Example: A stock market crash that causes most stocks to decline in value.

2. Interest Rate Risk: Changes in interest rates affect borrowing costs, corporate profits, and the value of financial instruments.

Example: Rising interest rates make borrowing more expensive, reducing corporate profits and decreasing stock prices.

3. Inflation Risk: Inflation erodes purchasing power and affects investment returns, especially for fixed-income securities. Systematic risk, also known as market risk, is the type of risk that affects the entire market or a broad segment of the economy. It cannot be eliminated through diversification.

4. Currency Risk (Exchange Rate Risk): Fluctuations in foreign exchange rates impact businesses that operate internationally or invest in foreign assets.

Example: A depreciation of the domestic currency increases the cost of imports, affecting profitability for import-dependent companies.

5. Geopolitical Risk: Political instability, conflicts, trade wars, and government policies can disrupt markets and economies.

Example: A sudden war or trade sanctions can disrupt global supply chains and reduce economic growth.

d) Assessment of the working capital options

Option 1 – Evaluation of early payment discount:

	FRW	FRW	FRW
Current trade receivables	$= 20,000,000,000 \times (60/365)$		3,287,671,233
New level of trade receivables:			
Taking discount	$= 20,000,000,000 \times 35\% \times (30/365)$	575,342,466	
Not taking discount = $20m \times 65\% \times (60/365) =$	$= 20,000,000,000 \times 65\% \times (60/365)$	2,136,986,301	(2,712,328,767)
Reduction in trade receivables			575,342,466
Finance saving on trade receivables at	$8\% \times 575,342,466$	46,027,397	
Decrease in bad debts		60,000,000	
Savings in administration costs		20,000,000	126,027,397
Less: cost of discount	$= 20,000,000,000 \times 35\% \times 1\% =$		70,000,000
Net benefit			56,027,397

Option 2 – Evaluation of factor's offer:

	FRW	FRW	FRW
Current trade receivables			3,287,671,233
Trade receivables under factor	$= 20,000,000,000 \times (30/365)$		1,643,835,616

Reduction in trade receivables			1,643,835,616
Reduction in financing cost	$= 8\% \times 1,643,835,616$	131,506,849	
Reduction in bad debts	$= 200,000,000 \times 80\%$	160,000,000	
Administration savings		160,000,000	
			451,506,849
Increase in financing cost:			
Increased cost of 80 per cent advance:	$(1,643,835,616 \times 80\% \times (12\% - 8\%))$	52,602,740	
Annual fee of factor	$= (1.75\% \times 20,000,000)$	350,000,000	402,602,740
Net benefit			48,904,110

The savings using the discount (FRW 56,027,397) are marginally higher than the savings from using the factor (FRW 48,904,110), so the discount is preferable on financial grounds.

QUESTION FOUR

Question 4	Description	Marks	Total Marks
a)	Explain Terms Cock tail Bond	2	
	Benefits (1 Mark each, 3 Marks)	3	5
b)	Present Value of year 1 – 5	1	
	Present Values of year 6 – 10 (0.5 Marks each, 2.5 Max)	2.5	
	Total Present Values	0.5	4
c)	Advantages of Euromarkets (1 Mark each, 4 Max)	4	
	Potential problems of Euromarkets (1 Mark each, 3 Max)	3	7
d)	Positive implications of licensing (1 Mark each, 5 Max)	5	
	Negative implications of licensing (1 Mark each, 4 Max)	4	9
	Total		25

a) Explain the what is meant by the term ‘cocktail bond’ and discuss how it would be beneficial to Nyanza Plc

A cock tail Bond typically refers to a type of bond that combines features of both fixed and floating rate of interest. This bond allows invest to pay fixed interest for certain period of time and fluctuating interest based on availing interest on the market. This hybrid structure can appeal to investors looking to diversify their interest rate exposures on manage interest rate risk.

The term "cocktail bond" in finance describes a bond that incorporates features or qualities from different bond kinds into a single asset. By combining these features, issuers can customize the bond to best suit the interests of individual investors or to increase the bond's marketability.

Five Benefits of a Cocktail Bond:

1. Diversified Risk Exposure – By blending features of different bonds, cocktail bonds reduce the risk associated with any single type of bond.
2. Optimized Returns – Investors can benefit from a combination of interest rate structures (fixed and floating), leading to potentially better returns in changing market conditions.
3. Inflation Protection – Some cocktail bonds include inflation-linked components, helping investors maintain purchasing power over time.
4. Currency Hedging – If structured with multi-currency features, cocktail bonds can help investors hedge against currency fluctuations.

5. Customizable Investment Options – Issuers can design cocktail bonds to suit different investor needs, offering flexibility in terms of interest rates, redemption options, or maturity structures. A cocktail bond is a hybrid financial instrument that combines features of different types of bonds to offer a mix of benefits to investors. These bonds are structured to provide a balance between risk and return by incorporating elements such as fixed and floating interest rates, different maturities, or a mix of currencies.

6. Minimization of financing costs

b) Calculation the present value of total interest payments

Bonds are assumed to be risk free

Year	Interest rate	Principal in FRW Millions	Interest payable	Discount factor	Present Value
Year 1 - 5	18.00%	1,000	180	3.128	563.04
Year 6	16.30%	1,000	163	0.404	65.87
Year 7	14.50%	1,000	145	0.388	56.20
Year 8	12.20%	1,000	122	0.398	48.58
Year 9	10.50%	1,000	105	0.407	42.75
Year 10	10.00%	1,000	100	0.386	38.55
				Total cost	814.99

c) Advantages of the Euromarkets and their potential problems

Advantages of Euromarkets

1. Lower Interest Rates – Borrowers often benefit from lower interest rates compared to domestic markets due to reduced regulatory costs and higher competition among lenders.
2. Diversification of Funding Sources – Companies can raise capital from international investors, reducing dependence on domestic markets.
3. Less Regulation – Euromarkets transactions generally face fewer restrictions and reporting requirements than domestic bond or loan markets.
4. Flexibility in Structuring Deals – Euromarkets instruments can be tailored to meet specific needs, such as customized maturities and interest rates.
5. Increased Liquidity – Large multinational banks and institutions participate in Euromarkets markets, providing ample liquidity.
6. Currency Hedging Opportunities – Businesses with euro exposure can use Euromarkets to match currency flows and reduce exchange rate risk.

Potential Problems of Euromarkets

1. Exchange Rate Risk – If a borrower earns revenue in a currency other than the euro, fluctuations in exchange rates can increase repayment costs.
2. Political and Economic Risks – The stability of the euro and the economic conditions in the Eurozone can impact interest rates and investor confidence.
3. Limited Legal Protection – Since Euromarkets operate outside the Eurozone’s regulatory framework, investors may face legal uncertainties
4. Market Volatility – Global economic events can lead to fluctuations in interest rates and demand for Euromarkets instruments.
5. Dependency on International Markets – Companies relying heavily on Euromarkets financing may face funding difficulties if global financial conditions tighten.
6. Range of products – The Euromarkets provide a flexible range of products, including interest rate swaps and currency swaps, and there is an active secondary market in many of the securities. They are capable of handling very large loan offers within a short lead time, compared with domestic markets that have queuing processes.
7. Lower issue cost –The cost of debt issuance is normally lower than the cost of debt issue in domestic Markets.
8. Need for high rating – In order to borrow on the Euromarkets, Nyanza would need to achieve a high rating by an international rating agency or, as an alternative, would need to have any issue of funds guaranteed by the Rwanda Government. Since the loan would be in a hard currency, the market will need to be sure that the company will have access to sufficient hard currency to pay interest and repay the principal.

d) Implications for Nyanza of choosing a licensing arrangement

Positives:

1. Access to Established Brands & Technology – The licensee gains access to established brands, patents, or technology without investing in R&D.
2. Lower Initial Investment – Licensing avoids the high costs of developing proprietary products or technologies.
3. Faster Market Entry – A company can quickly introduce products using an existing brand or technology.

4. Revenue Generation for Licensor – The licensor earns royalties or fees without needing to manufacture or market the product.

5. Reduced Business Risk – The licensee minimizes risks associated with product development and market acceptance.

6. Expansion into New Markets – The licensor can expand internationally by allowing local companies to use its brand.

7. Competitive Advantage – The licensee can gain an edge over competitors by using superior technology or a well-known brand.

Negatives:

1. Loss of Control – The licensor may not have full control over how the licensee uses its brand or technology.

2. Quality Control Issues – Poor-quality products from the licensee can damage the licensor's reputation.

3. Limited Revenue Potential for Licensee – The licensee has to pay royalties, reducing overall profit margins.

4. Risk of Creating a Competitor – The licensee might gain enough knowledge to develop its own competing products.

5. Contract Limitations – The agreement may restrict the licensee's ability to innovate or expand beyond agreed terms

The end of Model answers and Marking Guide