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**CERTIFIED PUBLIC ACCOUNTANT  
INTERMEDIATE LEVEL EXAMINATIONS**

**11.1: MANAGERIAL FINANCE**

**DATE: THURSDAY 30, MAY 2024**

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**INSTRUCTIONS:**

- 1. Time Allowed: 3 hours 15 minutes (15 minutes reading and 3 hours writing).**
- 2. This examination has two sections; A & B.**
- 3. Section A has three Compulsory Questions while B has three questions of which two Should be attempted.**
- 4. In summary attempt Five questions.**
- 5. Marks allocated to each question are shown at the end of the question.**
- 6. Show all your workings where necessary.**



## SECTION A

### QUESTION ONE:

a) MECAR GARAGES Ltd, a company headquartered in Kigali City-Remera has issued 2.5 million ordinary shares of FRW 100, which are currently selling at FRW 400 per share. MECAR GARAGES Ltd wants to issue right to purchase a share at lower price to market value at FRW 300 for 1 new ordinary share for every 3 ordinary shares held. Gakuba, a shareholder who owns 1,500 Shares thinks that, they will suffer a loss in personal wealth because the new shares are being offered at a price lower than market value.

#### Required:

- i) Calculate the theoretical ex-rights price (2 Marks)
- ii) Determine the value of rights (2 Marks)
- iii) Determine the effect on Gakuba's wealth if:
  1. They sell all the rights (2 Marks)
  2. They do nothing (2 Marks)

b) ROBOTIC SOLUTION COMPANY Ltd, is public company headquartered in Kigali City, deals in technology of computers. ROBOTIC SOLUTION COMPANY Ltd, is in the process of determine the appropriate cost of capital to evaluate the viability of alternative projects. The following data is available to help finance team in this process:

1. The company currently pays dividend of FRW 200 per share. The growth rate is equal to 5% per annum.
2. The market price of 10% Irredeemable loan note is FRW 900 ex interest.
3. Convertible debt will be redeemable in five years at par, they are currently quoted at FRW 8,000 per FRW 10,000 nominal. A loan note can be converted into four shares in five years' time. A share has a current market value of FRW 1500 and is expected to grow to 6% per annum.
4. Corporate tax rate is at 30%.
5. The company has its capital structure as follows:

	FRW'000'
Ordinary share capital (FRW1000)	15,000
10% Irredeemable loan note (FRW 1000)	35,000
12% Convertible debt (FRW 10,000)	40,000
<b>Total</b>	<b>90,000</b>



**Required:**

Using the information above, calculate the:

- i) Cost of equity** (1.5 Marks)
  - ii) Cost of irredeemable loan note** (1.5 Marks)
  - iii) Cost of convertible debt** (7.5 Marks)
  - iv) Weighted average cost of capital** (2.5 Marks)
- c) Differentiate between Efficient Frontier and Capital Market Line.** (4 Marks)
- (Total: 25 Marks)**

**QUESTION TWO:**

TABAGWE Ltd has presented the following information about its stocks A and B:

State of Economy	Probability of State of Economy	Expected Return on Stock A	Expected Return on Stock B
Recession	0.13	0.13	-0.23
Normal	0.43	0.14	0.13
Unusual volatility	0.2	0.06	0.29

According to TABAGWE Ltd, expect a market premium of 8% as well as a risk-free rate of 3%.

**Required:**

- a) Using appropriate calculations:**
    - i) Determine which stock has the most systematic risk.** (6 Marks)
    - ii) Determine which stock has the most total risk.** (6 Marks)
    - iii) Indicate which stock carries the most risk in a portfolio perspective and why.** (2 Marks)
  - b) Discuss three applications of Capital Asset Pricing Model (CAPM).** (6 Marks)
- (Total: 20 Marks)**



### QUESTION THREE:

Ms Kamagaju Lydia is a Finance Director for Ngimbi Ltd. She has been asked to analyse the information below relating to a four-year project and advise Ngimbi Ltd.

Particulars	Amount (FRW 'million')	Amount (FRW 'million')
	At year 0	At year 1
Depreciable fixed assets	3,400	
Working capital	250	
Sales		2,400
Materials		424
Labour		990

Ms Kamagaju Lydia was provided with the following additional information:

1. Selling prices, working capital requirements and overhead expenses are expected to increase by an inflation rate of 5% per year.
2. Material costs and labour costs are expected to increase by an inflation rate of 10% per year.
3. Capital allowances (tax depreciation) are allowable for taxation purposes against profits at 25% per year on a reducing balance basis.
4. Taxation on profits is at a rate of 30%, payable one year in arrears.
5. Ngimbi Ltd pays a cost of capital of 10%.
6. The working capital is released at the end of the project.
7. All receipts and payments arise at the end of the year to which they relate, except those in year 0, which occur immediately.

#### Required:

Assume you are Ms Kamagaju Lydia, calculate the net present value of Ngimbi Ltd.'s project. Note: Round your calculations to the nearest whole number.

(Total: 15 Marks)



## SECTION B

### QUESTION FOUR:

KANGONDO Ltd has presented financial information below:

Year	Year 1 (FRW)
Sales	124,000,000
Costs	65,000,000
Investment	12,000,000

Sales, costs, and investments are expected to grow by 5% per year for the next three years, beyond which they will all grow by 3% indefinitely. KANGONDO Ltd has 400,000 stock shares outstanding and investors require a return of 10% on their shares. KANGONDO Ltd pays a tax rate of 30%.

#### Required:

- a) Compute KANGONDO Ltd.'s current share price.

*Note: Please round your calculations off to the nearest whole number* (15 Marks)

- b) State five advantages of Block chain in Finance.

(5 Marks)

**(Total: 20 Marks)**



**QUESTION FIVE:**

a) You have been hired as a Treasury Officer of Mukura Limited, a company that imports home appliances from China and turkey. One of your tasks is to ensure that cash budgeting is done on time and always inform the management of any a gap found in the budgeting exercise.

While talking to different departments you noticed that the company’s credit policy says that all goods sold at least 60% must be paid upfront in the month of sales and 30% paid in second month while remaining 10% to be paid in third month.

The company has made a deal with suppliers that for all the expenses incurred, 40% of cost is paid within the month of purchase, 30% in the second month while the remaining 30 % is paid in the 3<sup>rd</sup> month.

All other cash flows expected including capital expenditures and loans are to be paid in the same month they are expected.

Below are forecasted expenses and income together with other cash flows expected to be incurred in the next quarter.

	July 2024 FRW Million	August 2024 FRW Million	September 2024 FRW Million
Sales to be made	30	50	70
Variable expenses	10	20	30
Loan repayment		20	
Purchase of equipment	3		8
Bonus payment for year ended 2023			15

**Required**

**Prepaid cash budget for the 1<sup>st</sup> quarter of 2024 assuming that cash balance as at 31<sup>st</sup> December 2023 was zero. (16 Marks)**

**b) Highlight 4 different defense tactics that can be used to counter hostile takeover Bid (4 Marks)  
(Total: 20 Marks)**



**QUESTION SIX:**

a) The Chief Finance Officer (CFO) of Gasabo Cake Limited has identified a target company to acquire in its expansion plan, Kinigi bakery limited is registered and based in Musanze district producing wedding cakes and other cakes for different events. The company has been paying dividend yearly as listed below and the CFO is keen to use the same information for valuation purpose.

	2018	2019	2020	2021	2022
Dividend per share FRW	25	28	32	34	35

**Required:**

- i) Using Gordon’s growth model, advise the CFO on the intrinsic value they could pay to buy Kinigi bakery Limited, the company’s cost of equity stands at 15%. (5 Marks)
- ii) Identify four possible motivations of different stakeholder towards the company. (4 Marks)
- b) Nakamaro supermarket which has been one of biggest supermarket in Rwanda and across the region closed its business recently due to different issues in operations and its cash management. It has been facing issues of paying its suppliers, and delays in paying its employees.

**Required:**

You have been approached as a CPA intermediate candidate to identify the three symptoms, three causes and three remedies of over trading in the company (9 Marks)

- c) Highlight two characteristics of warrants. (2 Marks)
- (Total: 20 Marks)**

**End of Question Paper**











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