CERTIFIED PUBLIC ACCOUNTANT

INTERMEDIATE LEVEL EXAMINATIONS

I1.1: MANAGERIAL FINANCE

WEDNESDAY: 4 DECEMBER 2019

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 **two** to 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

SECTION A (COMPULSORY)

QUESTION ONE

(a) Kanyamanza Ltd is considering manufacturing and selling a wireless Bluetooth speaker aimed primarily at the younger generation to be used on promos, parties and other forms of entertainment. The speaker is said to have two major advantages: Portable and high sound. A firm of consultants has conducted a feasibility study for Kanyamanza Ltd at a cost of Rwf 25,000,000. This amount is to be paid at the end of year 1. There would also be two requirements for production machinery:

- Some existing machinery could be adjusted at a cost of Rwf 140,000,000 to form phase 1 of production.
- For product testing, the company has suitable machinery which is not in use; its book value is Rwf 80,000,000. While its net realisable value is Rwf 60,000,000, it has been determined that it would be difficult to dismantle.

It is still debated as to whether the project should go ahead. If it does, the following working capital requirements would be needed:

1. Machinery maintenance costs of Rwf 10,000,000 per annum
2. Additional costs of Rwf 60,000,000 at the commencement of the project.

The aforementioned working capital requirements would be recovered at the end of four years. As soon as the project is approved, the following costs shall be incurred as indicated:

1. Marketing costs of Rwf 30,000,000 at project approval.
2. Annual marketing costs of Rwf 20,000,000 for four years.

Following negotiation, the existing machinery supplier has agreed to refund 50% of the total marketing costs. This refund would be affected equally in year 3 and 4 of the project.

The selling price and cost per unit is suggested as follows:

	Rwf	**Rwf**
Selling Price		50,000
Direct materials	10,000	
Direct Labour	7,000	
Variable Overheads	12,000	29,000
General fixed overheads (absorbed)	9,000	
Bank interest (absorbed)	2,000	11,000
Total		**40,000**
Profit		**10,000**

Additional Information:

i. General fixed overheads do not include the costs of a specialised fabricating machine. The costs are Rwf 20,000,000 (including annual depreciation of Rwf 10,000,000) to be divided over the four-year useful life of the speaker product. As this machine is a specialised machine the net realisable value is nil.

ii. The consultants have determined that the product would have a four-year useful life.

iii. From market research, Kanyamanza Ltd expects prices of year 2 and 3 to increase by 10% and prices of year 4 to revert back to year 2 selling price.

iv. Year 1 sales have been forecasted at 4,000 units and sales volumes are likely to increase by 10% respectively in year 2 and 3 but stay at the year 3 level in year 4.

v. All variable costs (direct material, direct labour and variable overheads) are expected to increase by 5% in year 2 and remain at year 2 level's going forward.

It costs the company 10% per annum to secure capital. Kanyamanza Ltd expects investments to deliver positive pre-tax net present value over the life of the four-year project.

REQUIRED:

Calculate the four-year net present value of the investment proposal if discounted at 10% (ignore taxation). Round off your figures to 2 decimal places. **(14 Marks)**

(b) Inka Ltd is considering the acquisition of a new machine with an expected life of three years. Inka is considering the following options:

1. Lease the machine for three years at Rwf 55,000,000 three equal payments, paid annually in advance.
2. Purchase the machine at Rwf 160,000,000 using a loan from Bank of Nyabihu (BoN) at a cost of 8% per year. If purchased, Inka Ltd will incur maintenance costs of Rwf 80,000,000 per year, payable at the end of each year of operation. The company's tax rate is 30% and the tax laws allow straight-line depreciation for 3 years.

REQUIRED:

Evaluate whether Inka Ltd should use lease or borrow as a source of finance. **(6 Marks)**

(c) Explain three advantages and two disadvantages of using payback period as an investment appraisal technique. **(5 Marks)**

[Total: 25 Marks]

QUESTION TWO

Igisupusupu Ltd is an online business and operates mainly in Rwanda. Last year, the company had sales of Rwf 15 Billion. The company had a 30 days credit policy.

The following extract indicates the company's most recent working capital indicators:

	Rwf (M)
Trade Receivables	2,466
Trade Payables	2,220
Overdraft	3,000

In order to encourage customers to pay on time, Igisupusupu Ltd proposes introducing an early settlement discount of 1% for payment within 30 days, while increasing its normal credit period to 45 days. It is expected by company management that on average:

- 50% of customers will take the discount and pay within 30 days.
- 30% of customers will pay within 45 days.
- 20% of customers will not be affected by the company policy.

Igisupusupu Ltd currently orders 15,000 units per month of product A, demand for which is constant. Last year, product A purchases cost was Rwf 540 M and there is only one supplier of the product in Rwanda. Product A's supplier has offered a 2% discount for orders of the product at above 30,000 units. Ordering and holding costs are Rwf 150,000 each order and Rwf 240 per unit respectively. Igisupusupu Ltd has an overdraft charging interest of 6% per year.

REQUIRED:

(a) By commenting on your findings, calculate the net effect of the proposed changes in the company's trade receivable policy. **(5 Marks)**

(b) Is the offered high volume purchase discount financially acceptable? Highlight your calculation assumptions. **(5 Marks)**

(c) If Igisupusupu Ltd was to determine the optimum cash level to be held, discus five factors it is likely to consider. **(5 Marks)**

(d) Discuss five factors to be considered in formulating a trade receivables management policy. **(5 Marks)**

(Total: 20 Marks)

QUESTION THREE

(a) Interest rates are forecast to key shareholders of Rwamagana Ltd, a company which employs you are requesting higher dividends. Your Chief Finance Officer has requested you to review Rwamagana Ltd.'s cost of capital as she is considering recommending the company's capital structure restructuring to the Board of Directors.

The following information is an extract of her recent memo to you:

Current capital Structure.

	Rwf (M)	**Nominal Value (Rwf)**	**Market Value (Rwf)**
Ordinary shares	2.5	1	3.95
Retained earnings	6.4		
6.5% preference shares	0.5	1	1.03
Bank loans (interest of 8.8%)	3.8		
8% irredeemable debentures	6	100	97

Additional Information:

- Rwamagana Ltd expects to pay dividends of Rwf 0.20 per share this year and dividends are expected to grow at 2.5% per annum.
- Nominal and market values are on a per share basis.
- Expected market returns are 12%.
- The company compares risk free rate of 2.6% to the treasury bills as shared by National Bank of Rwanda.
- The Company's Beta is 1.12.
- The current corporate tax rate is 12.5%.

REQUIRED:

Compute the company's weighted average cost of capital using dividend growth model. **(8Marks)**

(b) Portfolio theory (PT) plays a significant role in the financial market world. Analysts often refer to the analysis of expected return versus risk.

REQUIRED:

Evaluate briefly seven difficulties in applying portfolio theory (PT) **(7 Marks)**

(**Total: 15 Marks)**

SECTION B (ATTEMPT ONLY TWO QUESTIONS)

QUESTION FOUR:

Companies and individuals rely on various sources of funds to finance their operations and investments. It is argued that how quick and cheap a firm can source financing highly determines its success.

REQUIRED:

(a) Discuss two types of share capital available for prospective shareholders**.** **(5 Marks)**

(b) Discuss five ways of investment that can be followed by a typical venture capitalist in funding. **(5 Marks)**

(c) Discuss five challenges that the Rwandan capital market has faced over the past few years. **(5 Marks)**

(d) Explain five roles of capital markets in an economy. **(5 Marks)**

(**Total: 20 Marks)**

QUESTION FIVE

(a) Tengera Ltd manufactures a special type of bread for tourists in major tourism destinations in Rwanda. These are sold to retailers across major secondary markets for attraction of tourists in the country. The company uses a standard marginal costing system in accounting for labour and materials. The standard cost of a bread unit, based on normal production output of 1,000 units, is as follows:

	Rwf
Material – flour (100 Kilograms @ Rwf 150 per Kg)	15,000
Direct labour (4 hours @ Rwf 2,500 per hour)	10,000
Variable overheads (4 hours @ Rwf 1,500 per hour)	6,000

Tengera Ltd.'s budgeted selling price is Rwf 40,000 per unit.

For May 2019, Tengera Ltd accepted orders for 1,200 bread units, grossing income of Rwf 54,000,000

The cost of Production for May 2019 was:

Actual Costs:	Rwf
Flour (132,000 Kgs)	15,840,000
Labour (5,100 hours)	13,260,000
Variable overheads	7,650,000
Total variable costs	36,750,000

Tengera Ltd has requested to receive a report on the financial statements for May 2019.

REQUIRED:

(i) Define a budget **(2 Marks)**

(ii) Prepare an Operating statement for May 2019, reconciling the actual and budgeted profit for the bread product for tourists. **(12 Marks)**

(b) Discuss the purpose of budgeting as used by the Rwandan government. **(6 marks)**

(**Total: 20 Marks)**

QUESTION SIX

(a) Financial Management is a significant part of a senior manager's responsibilities. It is often argued that it would be difficult for a senior executive to succeed in their responsibilities if they are unable to manage finances efficiently and effectively. It is part of the overall strategy.

REQUIRED:

(i) Discuss three financial and three non-financial objectives of a company (**6 Marks)**

(ii) Explain the principal-Agent problem in reference to a company (**2 Marks)**

(b) Corporate governance impacts the way companies make decisions, their financial organisation and their relations with investors and auditors. In Rwanda a number of laws, regulations, and policies have been put in place to provide guidance on the direction and co-ordination of business. The law governing companies is a key player.

REQUIRED:

Discuss the likely impact of non-compliance with corporate governance requirements on business in Rwanda. **(7 Marks)**

(c) Government is often a key stakeholder in the corporate world and often influences how businesses operate.

REQUIRED:

Appraise how government influences businesses in Rwanda. **(5 Marks)**

(**Total: 20 Marks)**