CERTIFIED PUBLIC ACCOUNTANT

ADVANCED LEVEL 2 EXAMINATIONS

A2.2: STRATEGIC PERFORMANCE MANAGEMENT

DATE: THURSDAY,01 DECEMBER 2022

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

Rwamagana Multipurpose Group (RMG)

Rwamagana Multipurpose Group (RMG) is a group of companies registered and operating in Rwanda for many years. Due to the fluctuations of market and demands, the board of directors decided to diversify the operations of RMG Ltd in different sectors. As a results, RMG has registered three companies operating in manufacturing sector but in different orientations where **Rwamagana Garment Company (RGC) Ltd** is operating in garment and apparel manufacturing while **Rwamagana Best Chalk Company (RBCC) Ltd** has been established to manufacture chalks and **Rwamagana 5K Furniture Ltd** specializing in making a well-known and high-quality furniture and woods ‘related materials in the country. Apart from the board of directors of RMG Ltd as the group, each of the three companies has its own and independent board of directors.

Rwamagana Garment Company (RGC) Ltd

RGC Ltd operates in Rwamagana special economic zone, in recent years, it has developed a high market base due to the improved quality of its products. RGC Ltd introduced the Made in Rwanda quality clothes which have the popularity all over the country. Amongst the RGC Ltd current models, it is well-designed trouser and skirts which are considered to be the most profitable product of the company. Both products are made using different materials mainly including fabrics, sewing threads. Sewing threads are available on the local market in plenty, while the fabrics should be imported from abroad as RGC Ltd use high quality fabrics. Apart from fabrics both products require specialized labor.

The following is unit cost related information as extracted from the management accounts of RGC Ltd.

Description	**Trouser**	**Skirt**	**Total**
	FRW	**FRW**	**FRW**
Selling Price	10,000	7,000	17,000
Costs			
Material Costs (Fabrics FRW 2,000 per meter)	4,000	3,000	7,000
Labor Costs-FRW 800 per labor hour	1,200	1,600	4,200
Other variable costs	1,600	1,200	2,800
Total Variable Costs	**6,800**	**5,800**	**14,000**
Contribution	**3,200**	**1,200**	**3,000**
Fixed Costs			
Manufacturing			800
Marketing and distribution			400
Total fixed costs			**1,200**
Profit			**1,800**

Quarter one:

In coming quarter one, RGC Ltd expects demand for each of the two products, as follows

Type	Expected demand (Units)
Trousers	18,000
Skirts	24,000

Due to the famous and popularity of the fabrics being used by RGC Ltd, it has been noticed that the supply of fabrics in coming quarter one is going to be limited to only 90,000 meters. Recently, prior to this market fluctuation, RGC Ltd had been offered a contract with a local secondary school (Future Leaders Academy), to supply it with 20,000 skirts in the next quarter, at a discounted price of FRW 6,000 per skirt. Future Leaders Academy has schools in almost all district of Rwanda. The order from Future Leaders Academy of 20,000 skirts is not included in the expected demand levels highlighted above.

Quarter Two:

In quarter two, it is expected that the international market shortage in fabrics supply issue will persist, RGC Ltd will use specialized tailors who are few in local labour market. As a result, P&S G Co will be having only the ability to employ the maximum of 7,500 labour hours and 9,000 meters for labour and fabrics respectively. Due to the difference in market share of both products and high demand of skirts, the expected production of skirts in the quarter two should not be less than twice as more as the production of trousers. The normal loss for each unit of skirt and trouser produced is 0.02 meter.

RGC Ltd is expecting more orders from schools as the start of the academic year is approaching, in these periods as the garment manufacturers experience high demand of clothes. RGC Ltd is expecting the shortage of labour to respond to the potential demand, expected offers and customer deadlines in quarter two. The issue of labour shortage has been raised by the Chief Executive Officer (CEO) in senior management meeting and the CEO is considering adopting the overtime pay policies of FRW 4,500 per labor hour or hiring external part time tailors who will be paid at a rate of FRW 4,400 per labour hour.

Required:

i. **Considering the contract from Future Leaders Academy, calculate the shortage of material (Fabrics), the resulting optimum production plan and the total profit of RGC Ltd for quarter one** (7 Marks)

ii. **For the RGC Ltd, advise on which optimum level of production to be produced in quarter two and which related maximum contribution and profit** (11Marks)

iii. **Briefly discuss the proposals of the RGC Ltd' s CEO regarding the overtime and part time hourly rate payments.** (2 Marks)

Rwamagana Best Chalk Company (RBCC) Ltd

RBCC Ltd is a company under the RMG specializing in the production and trade of high-quality chalks used in many schools of the country and the region. The business of RBCC Ltd is normally split into two parts, wholesaling to sales agent in different regions and retailing to any customer who may wish to buy in bulk from the factory premises. RBCC Ltd operates under the Just in time system and it produces based on different customers specifications. A box is, therefore, considered the basic sales unit.

Although management had made detailed estimates of costs and volumes prior to the start of every financial year, new projections based on actual cost experience are now required. Income statements for the last two months of July and August are each thought to be basis of the costs and productive efficiency we can expect in the next few months.

The following is the income statements of the months of July and August as extracted from RBCC Ltd management reports.

	Months	
	July	**August**
Level of Activity	10,000	48,000
	FRW (000)	**FRW (000)**
Sales revenues	225,000	315,000
Cost of Sales	131,250	165,000
Gross Profit Margin	**93,750**	**150,000**
Other Expenses		
Selling and Distribution	121,875	129,375
Other Administrative	8,650	9,210
Total other expenses	**130,525**	**138,585**
Net Income before taxes	(36,775)	11,415
Taxes	-	3,424.5
Net Income After taxes	**(36,775)**	**7,990.5**

The following additional information is to be considered:

1. Cost of sales, Selling and distribution costs and Other administrative costs all include both variable and fixed production costs of chalk.
2. RBCC Ltd.'s income tax rate is 30% and this rate has been used to estimate the tax liability arising from the chalk resulted profits.
3. The board of directors of RBCC is considering the investment in a highly specialized chalk manufacturing machine costing FRW 60 million in next few months. The expected after-tax return on this investment (ROI) is 15%.
4. Recently, RBCC's Ltd marketing director proposed that if the selling price is reduced by 10% per box of chalk and a FRW 8,500,0000 injection in advertising campaign among different schools is considered, sales would increase by 15% over the month of August.

Required:

i. **Advise the management of RBCC Ltd on the monthly number of chalk boxes to be produced and sales revenues to break even**. (9 Marks)

ii. **Advise the board of directors on the number of boxes of chalk to be produced and total revenues if the proposed investment is undertaken for RBCC Ltd to earn the expected ROI.** (4 Marks)

iii. **Evaluate the proposal of the marketing director and advise the management of RBCC whether the plan should be implemented.** (6 Marks)

Rwamagana 5K Furniture (R5KF) Ltd

Rwamagana Multipurpose Group (RMG) also owns a best furniture manufacturing plant in its investment portfolio, which is R5KF Ltd. This company is very known for its best quality and durable home furniture. R5KF Ltd has won the heart of almost 40% of the current total market. Recently, due to the good relation with the RMG companies, Future Leaders Academy is considering to offer R5KF Ltd a contract to supply 20,000 adjustable students' desks & chairs and 52 office staff chairs. Student desk and chair are considered as one unit as they are attached and cannot be separated. Future Leaders Academy is offering R5KF Ltd a price of FRW 10,000 and FRW 48,000 per one student chair & desk and staff chair respectively.

This offer is a bit specific as it is different from the specifications of chairs that R5KF Ltd is used to produce. These chairs will require specialized materials including woods, chair bases, armrests and pads, polyurethane parts and chair adjustable steel sheet (6*48 crem). Even though this contract is not large, R5KF Ltd is highly concerned with it as it is considering and expecting the future business and demand as this school is growing too fast and accumulating a large market share in Rwanda and the region. R5KF Ltd is therefore keen to quote a competitive price for the job. R5KF Ltd management accountant has tasked the finance internee to prepare a quote for review. Below is the quote of one unit of student and staff chair along with the basis for calculations as prepared by a finance internee before review:

Details	**Student desk and Chair**	**Staff Chair**
	FRW	**FRW**
Selling Price	10,000	48,000
Costs		
Material Costs	6,500	28,900
Labor Cost	4,500	12,400
Other Overhead costs	6,900	16,200
Total Costs	**17,900**	**57,500**
Profit	**(7,900)**	**(9,500)**

Material costs:

1. R5KF Ltd would need 52 chairbases and 20,000 chair foots for staff and student chairs respectively. The company purchasing department conducted the market survey and it revealed that the current market price of one good quality chair-base is FRW 28,900.

   In its inventory, R5KF Ltd possesses 32 chairbases with no expected future use, these bases have been bought at a price of FRW 31,800 each but currently they can be sold at FRW 23,200 each. Chair foot will also be required to produce student chairs, the current unit market price of a chair foot is FRW 5,400 each, although R5KF Ltd has already 20,800 chair foots in its inventory. These were bought at a price of FRW 6,500 each last month. The chair foots used in this type of chairs are very popular and frequently preferred by many R5KF customers.

2. R5KF Ltd would also need armrests for staff chairs. Each staff chair would need two armrests. The company has 70 armrests in its inventory since last month with no expected further use, but the issue is that they are different in the current needed size. Armrests need to be revised to meet the needed quality standard. The 70 armrests were purchased at FRW 7,400. R5KF Ltd to modify the current armrest could cost the company FRW 1,200. The current market price of the armrest is FRW 4,875, although its price is FRW 2,100 when R5KF Ltd tries to sell them.
3. There will be a need of chair adjustable steel sheet (6*48 crem) equivalent to a number of students desks &chairs that will be made (i.e., 20,000 students chairs & desks). Its current market price is FRW 5,000 but due to its shortage on the local market it is being speculated that this price will grow by 5% of its current price in three months' time.

Labor Costs

4. The company will take two weeks to complete both products in the order. Twelve carpenters will be allocated for each product. Each carpenter is paid a fixed monthly gross salary of FRW 100,000. A half of allocated twelve carpenters have spare capacity to complete the job, for other half would need to be moved from another ongoing contract (Contract to supply AH Co) which has been suspended due to the material stockouts, they will wait for three weeks to receive those materials from abroad. Agreement with AH Co stipulates that for any delay in supply, R5KF Ltd will pay AH Co FRW 50,000 as penalty.
5. The designer expert will spend the whole two weeks' time checking and providing all design related advices. R5KF Ltd as the company has only one designer expert, he is always busy with plenty of assignments and works of designs. As a result, he will need to work for the overtime hours. He is expected to spend 15 hours to this particular job as overtime. He is paid an hourly rate of FRW 8,000 and is paid for all overtime at a premium of 50% above his normal hourly rate.

Other Overhead Costs

6. There would be a need to progressively and physically inspect the types of desks and chairs to be made. As a results two carpenters have to visit the school. The company would spend total daily subsistence allowance of FRW 50,000 on each carpenter on each visit. All employees of

R5KF Ltd are entitled to this allowance when visiting client's site. It is expected that each carpenter will make 5 visits at the school.

Note: You should assume that there are four weeks in each month and that the standard working week is 40 hours long.

Required:

i. **By discussing the basis of the valuation provided for each item using relevant cost principle, review and where necessary revise the costs statement elaborated by the finance internee and advise whether the offer should be accepted considering both financial and non-financial factors** (9 Marks)

ii. **Explain the implications of the minimum price that has been calculated in relation to the minimum price agreed with Future Leaders Academy** (2 Marks)

(Total: 50 Marks)

SECTION B

QUESTION TWO

Kandagira Ltd is a company that specializes in production and selling of movable washing taps. These washing taps were mainly found to be very useful measures to reduce the spread of Covid-19 were put in place. In 2020 alone, Kandagira Ltd was able to earn close to FRW 500M in sales revenues. In their recent management meeting, the management accountant challenged the Chief Financial Officer (CFO) that she no longer sees any need of sticking to the traditional budgeting methods; as according to her, she finds them rigid and do stifle innovations. The CFO intervened by arguing that even though it appears traditional, an incremental budget is very useful especially when an organization is budgeting for costs which can easily be estimated. Nonetheless, considering the drawbacks of traditional budgets, implementing 'a beyond budgeting approach' would be the most appropriate for Kandagira Ltd. The CFO was happy that the management accountant raised the budgeting issue and also proposed to the CEO that the company should adopt a beyond budgeting approach that uses adaptive management processes instead of relying on more rigid annual budget processes such as incremental budgets, currently in use. She went ahead to explain that with beyond budgeting, the focus will now be on cash forecasting rather than purely cost control. The CEO was happy to hear the proposal from the management accountant, and later the CFO but was curious on the implementation approach. He strictly asked the CFO to explain whether there will not able any bottlenecks as the company embarks on the new approach of changing its budgetary system.

Required:

a) **i) Critically evaluate the difference between incremental budgeting and rolling budgets**. (4 Marks)

ii) Discuss five limitations that could be encountered by Kandagira Ltd while using the traditional budgeting approach. (10 Marks)

iii) Assuming that Kandagira Ltd decides to immediately implement CFO's proposal of beyond budgeting approach, **discuss some of the difficulties they might encounter as they change the budgetary system.** (5 Marks)

b) Kandagira Ltd is considering extending into a new market by setting up its first subsidiary to sell washing taps into the neighboring country of Uganda as a new profit center. It intends to sell its products at a transfer price but unsure which factors will be put into consideration while setting up an effective international transfer price.

Required:

Advise the management of Kandagira Ltd the factors they should put into consideration when setting a multinational transfer price. (6 Marks)

(Total: 25 Marks)

QUESTION THREE

ISIMBI Super market possesses a bakery that manufactures bread, cakes, cookies and pancakes. The market for bread has been growing tremendously and ISIMBI owns over 60% of its market share; for cakes, ISIMBI also owns a substantial market share though operating in a low growth market; for cookies, they are operating in a high growth market but ISIMBI has a lower share; and the pancakes, both the growth and market share are too low.

Required:

a) **i) Using the BCG portfolio matrix, advise ISIMBI Supermarket on the strategies that can be deployed in order to balance ISIMBI's product range.** (8 Marks)
ii) Discuss at least four limitations of using a BCG portfolio matrix. (2 Marks)
iii) It is believed that forecasting is not somewhat easy: with examples, discuss five factors that might make it difficult to forecast future sales at ISIMBI super market. (5 Marks)

b) ISIMBI Super market also owns a coffee shop opposite the main entrance of the super market. The newly recruited accountant supports both the super market and the coffee shop but he does not seem to understand the difference between service costing against other manufacturing costing methods.

Required:

Referring to the coffee shop business, explain the specific characteristics of service costing

(10 Marks)

(Total: 25 Marks)

QUESTION 4:

Neptune & Venus Consult Ltd is the firm legally registered in Rwanda to operate different research related activities. The following is the summarized statement of profit or loss for the year ended 2020 and 2021 and its respective statement of financial position as at 2020 and 2021.

Neptune & Venus Consult Ltd
Statement of Profit or Loss for the year ended 2021

Accounts details	**2021**	**2020**
	FRW (000)	**FRW (000)**
Revenues	489,750,000	352,181,000
Cost of Sales	65,750,000	58,971,000
Gross Profit	**424,000,000**	**293,210,000**
Expenses		
Operating Expenses	21,300,000	17,650,000
Administrative Expenses	32,149,800	19,300,000
Other Expenses	7,550,200	15,260,000
Total	**61,000,000**	**52,210,000**
PBIDAT	**363,000,000**	**241,000,000**

Accounts details	2021	2020
	FRW (000)	FRW (000)
Finance Costs	2,000,000	1,800,000
Net Profit before taxation	**361,000,000**	**239,200,000**
Taxes (30%)	108,300,000	71,760,000
Net Profit After taxation	**252,700,000**	**167,440,000**

PBIT: Profit before interest and taxes

You have been also provided with the following summary of balances as at 01 January.

Details	01.01.2021	01.01.2020
	FRW (000)	FRW (000)
The allowance for doubtful debts	4,500,000	5,000,000
Total Equity	337,000,000	313,811,000
Total Debts	121,500,000	113,139,000
Total equity plus debts	**458,500,000**	**426,950,000**
	31.12.2021	**31.12.2020**
The allowance for doubtful debts	6,000,000	4,500,000

Additional information:

1. The following is the breakdown of other expenses for the periods ended 31st December 2020 and 2021:

Details	2021	2020
	FRW (000)	FRW (000)
Provision for court fees	120,000	98,000
Allowance for inventories	180,000	202,000
Other miscellaneous cash expenses	7,250,200	14,960,000
Total	**7,550,200**	**15,260,000**

2. Neptune & Venus Consult Ltd has an ongoing research project (Project GK) whose cost amounting to FRW 1,000,000 has been incurred in both 2020 and 2021 and expensed in their respective statement of profit or loss for the period as the external auditors advised the company that these research projects costs do not meet criteria for them to be capitalized.
3. Neptune & Venus Consult Ltd had been engaged in the research and development of a project of new product development of a local company. The developed product was ready for sale on 01st January 2020. The market research revealed that the product has been received well and it has high demand on the market. Due to current innovation and technology, the product is expected to last for two years on the market and the company did not expect any sale thereafter. The total costs incurred to this project by Neptune & Venus Consult Ltd before the product is ready for the market were FRW 30,000,000.
4. Neptune & Venus Consult Ltd had not made any provision for deferred tax.

5. Consider the following tax rates, cost of debt and capital for 2020 and 2021

Details	2021 (%)	2020 (%)
Pre-tax costs of debt	8	8
Cost of equity	15	13
Tax rate	30	30

Required

Calculate the Economic Value Added (EVA) of Neptune &Venus Consult Ltd for the year 2020 and 2021 (18 Marks)

Recently in the senior management the CEO suggested the use of short-term performance measures like Return on Investment, Residual income, use of financial ratios as a base of rewarding and measuring the divisional managers. He was arguing that this policy could improve the profitability and motivation among divisions. The CFO reacted on this and he said that he objects on the CEO' s idea. This idea has been brought at the end of the meeting and they did not find enough time to discuss this deeply.

Required:

Write an email to the CEO convincing him the following matters:

i. **Briefly discuss on the problems that may be involved in comparing divisional performance using RI and ROI** (3 Marks)

ii. **Analyze the objection of the CFO in both short- and long-term view and authenticity of the financial results when the idea of the CEO is bought.** (4 Marks)

(Total Marks:25 Marks)

End of Question Paper