

### CERTIFIED PUBLIC ACCOUNTANT

## **ADVANCED LEVEL 2 EXAMINATIONS**

## **A2.2: STRATEGIC PERFORMANCE MANAGEMENT**

**DATE: THURSDAY,02 DECEMBER 2021** 

## **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.

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## **SECTION A**

#### **QUESTION ONE.**

Three Brothers, Habakuki, Matayo and Mariko, during the joyful annual family meeting which took place on 1<sup>st</sup> January 2000, decided to put together their wealth and form a transport holding company which was named "The Brother Service Transport Limited" (TST Ltd).

The mission statement for TST Ltd is: To create and maximize the brother's value.

In July 2002, they started Kinigi Transport Company (KTC) Ltd with a capital share value of FRW 900,000,000 for transporting passengers to and from the Northern Province. On 22<sup>nd</sup> December 2019, they also formed another company called Butare Transport Company (BTC) Ltd with a capital injection of FRW 1,900,000,000 and it was accredited by Rwanda Utilities and Regulatory Authority (RURA) to conduct transport business in all the seven districts of the Southern Province.

# The following are audited financial data approved by the Board of Directors for the period ended 31<sup>st</sup> December 2020:

	31.12.2020	31.12.2020
Account Name	KTC	BTC
Assets	FRW ''000''	FRW ''000''
Propety, Plant and Equipment (PPE)	1,459,184	1,838,233
Transport software	60,000	40,000
Total Fixed Assets	1,519,184	1,878,233
Current Assets		
Inventory	18,274	61,194
Receivables	56,537	264,343
Cash and cash equivalents	260,000	350,000
Total Current Assets	334,811	675,537
Total Assets	1,853,995	2,553,770
Capital and Reserves		
Share capital	900,000	1,900,000
Retained earnings	150,059	(4,000)
Total Equity	1,050,059	1,896,000
Non-Current Liabilities		
Long term loan	465,600	600,860
Total Non-current Liabilities	465,600	600,860
Current Liabilities		
Payables	75,000	56,910
Bank overdraft	263,336	-
Total current Liabilities	338,336	56,910
Total Equity and Liabilities	1,853,995	2,553,770

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#### Additional information related to the financial year ended 31st December 2020:

	KTC	BTC
Turnover (FRW, "000")	1,500,000	900,000
Number of Passengers-	1,111	923
Deaths - Persons	5 persons	20 persons
Total KM travelled	600,000	360,000
Fuel cost (FRW)	900,000,000	338,400,000
Lost Courier	-	6
Staff Turnover	10 persons	2 persons
Waiting time for trip	1hr	20 min
Total Dividend paid (FRW)	30,000	15,000

The Chief Executive Officer (CEO) of TST Ltd after being presented by both company's Annual Financial Statements, called for an urgent shareholders meeting: the three brothers recommended that BTC Ltd should be closed immediately. The shareholders were not convinced and wanted a third-party analysis before taking the final decision. The shareholders recommended to evaluate KTC and BTC performance by using financial and non-financial performance maesures. The recommended financial ratios were Dividend Payout, Return on Capital Employed (ROCE), Cash ratio, Net Gearing and Liquidity ratios.

- The Three Brothers are worried about the economic value at TST Ltd following the unachieved targeted profit of FRW 350,750,000 from KTC and BTC Ltd, both combined. The TST earnings before interest and taxes for the financial year 2020 amounted to FRW 50,130,000. 60% of the company's assets are financed by debt which has an after-tax cost of 3%, while 40% is financed by equity with a cost of 7%. TST Ltd average total capital employed over the period amounted to FRW 41,320,000. Rwanda Tax law states that the Corporate Income Tax is at 30%.
- KTC Board of Directors (BoD) tasked the Chief Finance Officer (CFO) to determine whether Backflush costing can help the company to solve its issues at hand. The Board believes that there is still much to do on cost control regarding the different categories of expenses incurred by KTC Ltd. The proposal will be presented to the Board by end July 2021. The CFO thinks that this is not applicable in transport service industry.

In the Annual Board Meeting at KTC, the CFO declared that the targeted and budgeted profit for the year 2021 was at least FRW 50 million following the Covid-19 pandemic. Most of the passenger vehicles were predicted not to be in use from 1<sup>st</sup> January up to end March 2021 and the company was unable to save on fixed costs which include rent, drivers' salaries, insurance among others. Total expected fixed cost is FRW 21,500,000 while the variable cost and selling price per ticket are FRW 500 and FRW 1,500 respectively. The CFO was requested to present to all staff in the general staff meeting the targeted number of tickets to be sold in order to achieve the budgeted profit.

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#### Required

- a) Appraise the CEO's recommendation to close BTC by evaluating Both Companies performance using financial ratios recommended by the shareholders and the Non-financial performance indicators. (20 Marks)
- b) Suggest appropriate Business process re-engineering action that the CEO should implement in BTC in order to revamp the company. (8 Marks)
- c) By using EVA analysis, agree or disagree with Three Brothers on the worries of the economic value of TST Ltd for the FY ended 31<sup>st</sup> December 2020. (7 Marks)
- d) Evaluate the mission statement of TST Ltd and suggest an improvement, if required (5 Marks)
- e) Discuss whether Backflush Costing can solve costing issues at KTC Ltd. (5 Marks)
- f) i)Define target costing and calculate the number of tickets to be sold in order to earn a targeted profit at KTC Ltd. (3 Marks)
- g) ii) List four characteristics of a service business such as TST ltd. (2 Marks)

(Total 50 Marks)

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## **SECTION B**

#### **QUESTION TWO**

Bakame Construction Industry (BCI) Ltd is a construction company established in 1984 and it is based in Bugesera District of Rwanda's Eastern Province . BCI is one of the oldest construction companies in Rwanda and has built the strongest brand name among citizens. BCI uses a variety of building materials. Architects consult with structural engineers on the load-bearing capabilities of the materials with which they design, and the most common materials are concrete, steel, wood, masonry, and stone.

In order to remain competitive on the market, BCI has decided to increase its capital from FRW 2 billion to FRW 2.5 billion. The building materials are usually categorized into two sources: natural and manmade. Materials such as stone and wood are natural, and concrete, masonry, and steel are manmade.

BCI constructs using cement blocks. The following are the management data for the year ended 2020 on one small project to construct a small bridge at Gasogi main Road.

#### The standard cost card details of one large cement block are as follows:

	Quantity (Kg)	Cost/FRW
Cement	2	40
Sand	3	20

Actual data are as follows:

Cement 15,000Kg @41/= FRW 615,000

Sand 9,000Kg @18/= FRW 162,000

Actual number of cement blocks produced for the period are 5,000 units.

BCI also fabricates bricks and sells them to other external parties. The following are the financial data for the period ended 31<sup>st</sup> December for only the department of cement block:.

Description	Budget	Actual
Sales volume (Unity "000")	300	840
Selling Price/FRW	70	68
Cost per unit/FRW	30	26

BCI itself manufactures iron sheets for use on houses contracted and constructed. The raw materials are imported from China and take 2 months to arrive in Rwanda. This service appears more complex and the company is contemplating about buying iron sheets instead of making them internally.

Karengera Iron Sheet Company (KIC) is a specialized company in manufacturing iron sheets.

## The following are the financial data for making $M^2$ 6,500 of iron sheets on roofs for two houses contracted:

Description	Cost/M <sup>2</sup>
Flat metal	2,500
Paint	2,000
Labor	300
Electricity	300
Other cost	356

KIC has been approached by BCI which has made a bid to supply the M<sup>2</sup> 2,000 of iron sheets at a total contract price of FRW 35,000,000.

#### Required

- a) Calculate the Budgeted Sales Margin, sales margin Price Variance, Direct Material Mix Variance and Direct Material Yield Variance. (10 Marks)
- b) Advise whether BCI can accept the offer from KIC. (5 Marks)
- c) Discuss other non-financial factors, that can demotivate BCI to buy and continue to make iron sheets internally . (10 Marks)

(Total 25 Marks)

#### **QUESTION THREE**

Groupe Scolaire Officiel de Huye (GOH) is a private high school operating in Huye district of Rwanda's Southern Province.

The school is one of the oldest and famous in the country which was inaugurated in 1965 by the White Father Missionaries. GOH is also one of the most expensive schools in Rwanda. The school has the following objective: To develop an awareness of self-confidence, to develop sensitivity to others, to develop self-discipline, to develop self-esteem, to develop acceptable behavior and to develop cooperation.

The education sector is one of the areas affected by the decline in economy in 2019 and 2020. This private school want to prevent any issue that can make it shut down due to poor economic and living conditions forecasted for the new school calendar scheduled to start in September 2020. In line with that, the school wants to maximize the profits from all moneyto be spent.

## The following table shows statistics and projected student registration as provided by an Economist.

<b>Economic Condition</b>	Probability	Number of Student
		registration
Good	0.40	7,000
Average	0.35	6,000
Bad	0.25	4,500

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The teaching cost of one student is FRW 40,000 while the school fees is FRW 90,000. If the students do not enroll in full capacity as predicted, the school loses the fixed cost of FRW 4,500 per student as this is a non-avoidable cost.

During the period, the school will need to tailor the students uniform by using casual tailoring staff. The head teacher is aware that labor cost may be reduced as the number of uniforms are being produced, due to learning experience and tailors' efficiency.

The total predicted uniforms are 7,000 as per the numbers provided by the Economist in good economic conditions. The predicted labor cost for one uniform is FRW 15,000. An analyst has indicated that 80% learning curve will apply for the first 6,000 uniforms after which constant production will take place. The headmaster wants to know how much he can plan to spend and charge from the parents while enrolling students.

#### **Required:**

- a) Determine the Minmax, Maximax and Maximin for the school in order to predict its profitability for the new school calendar year to start in September 2021. (12 Marks)
- b) Calculate the Expected Value and comment on the results. (5 Marks)
- c) With calculations, comment and advise the headmaster of GOH the minimum total uniform cost he will charge parents. Learning factor for 80% is equal to -0.3219.

(8 Marks)

(Total 25 Marks)

#### **QUESTION FOUR**

WASAC is a product of reforms and institutional development of the former Energy, Water and Sanitation Corporation (EWSA). The Water and Sanitation Corporation (WASAC) is a Limited Liability Corporation registered under the company law of Rwanda with the Government as a sole proprietor/shareholder. WASAC is responsible for the growth and development of the water and sanitation sector.

WASAC's Mission is providing quality, reliable and affordable water and sewerage services through continuous innovations and detailed care to customers' needs.

The company provides support to citizens who are grouped together as a means of providing clean water at a cost. The government of Rwanda, with its Vision 2050, provides different incentives such as tax relief on private business companies and Non-GovernmentOrganizations (NGOs) which support the citizens in accessing clean water.

In Rwanda, through state partnership, there are several NGO's that provide water free of charge.

Healthy Water Company (HWC) limited is an hypothetical project planning to become a company soon. HWC will be on the market providing a number of water services including selling water pipes, drilling and flushing boreholes, distribution of clean water through building water tanks and taps. This shall be done via a bidding process and thereafter award tenders or contracts to the best bidders. Materials to be used in all of those services/operations are not made in Rwanda and are specialized, and need enough funding to be acquired. HWC's main

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project will be to dig water wells and pump water to water tanks and taps. This is the only unique service on the market. HWC will be selling water itself at a fixed price.

On the market, there are many companies that have been providing similar services over the last 20 years. One of them is called Robin Water Company (RWC) Ltd and holds over 50% of the market share.

Entering the market as a business company requires different legal requirements which include Taxpayer Identification Number (TIN) and Rwanda Registration Board (RDB) registration certificate.

Price for water for all public water points is standard and is set by Rwanda Utilities Regulatory Authority (RURA), however, private water points may fix their own prices.

Due to insufficient funds, the company is planning to hire part-time staff from competitors in the same business and freelancer water engineers.

In order to collect more market information as a new entrant, the caretaker CEO of HWC has received a lot of information from water business analysists and has decided to hire a company lawyer. He is challenged with countless emails. He is confronted on how to manage this issue going forward, even when the company starts operating across the country.

#### Required:

- A. By use of the Porter's five forces model, assess whether HWC Ltd can go on with entering into this new market. (15 Marks)
- B. Provide a strategic advice to HWC Ltd on how it can outperform its competitors.

(5 Marks)

C. Discuss the lean information system at HWC Ltd.

(5 Marks)

(Total 25 Marks)

**End of question paper** 

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