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CERTIFIED PUBLIC ACCOUNTANT

ADVANCED LEVEL 2 EXAMINATIONS

A2.2: STRATEGIC PERFORMANCE MANAGEMENT

DATE: THURSDAY, 27 APRIL 2023

INSTRUCTIONS:

- 1. Time Allowed: 3hours 45minutes** (15minutes 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

QUESTION ONE

You have been recently hired as a management accounting consultant in the Ministry of Information, Communication and Technology. The ministry wants to assess both financial and non-financial performance of the selected two key companies (**Rebero Investment Company (RIC) Ltd** and **Five Generation Computer Corner (5GCC) Ltd** in the industry of information technology, which will help the ministry during its policy formulation.

Financial performance measures

RIC Ltd and **5GCC Ltd** are very known computer and accessories manufacturing companies in Rwanda and in the region for their tight competition and they both have almost 70% of the computer industry market share. Recently the information technology industry faced a downturn due to the reduction of inputs and abnormal increase in input prices. In addition to that, due to COVID-19, the demand of information technology related items including computers and other accessories shrank significantly due to the reduction of purchasing power of their clients. This has resulted in the reduction of set prices by 5%.

The two companies use financial performance analysis including ratios to measure their profitability and position themselves against their competitors and also making benchmarks based on the industry averages.

Industry average ratios

| SN | Ratio type | Ratio |
|----|----------------------------|---------|
| 1 | Current ratio | 2:1 |
| 2 | Return on Capital Employed | 45% |
| 3 | Accounts receivable days | 35 days |
| 4 | Accounts payable days | 30 days |
| 5 | Debt ratio | 20% |

The following are some of the financial statements components as extracted from the company's unaudited financial report for the year ended 31st December 2022.

Statement of Profit or Loss for RIC Ltd and 5GCC Ltd for the year ended 31st December 2022.

| Accounts description | RIC Ltd | 5GCC Ltd |
|----------------------|-------------------|-------------------|
| | FRW (000) | FRW (000) |
| Revenues | 22,154,640 | 33,987,520 |
| Cost of sales | 7,249,691 | 11,456,810 |
| Gross Profit | 14,904,949 | 22,530,710 |

| Accounts description | RIC Ltd | 5GCC Ltd |
|--------------------------------|------------------|-------------------|
| | FRW (000) | FRW (000) |
| Operating expenses | | |
| Operating Costs | 9,424,000 | 11,564,892 |
| Administrative costs | 145,825 | 214,780 |
| Selling and distribution costs | 213,654 | 380,000 |
| Finance Costs | 89,700 | 15,120 |
| Total Expenses | 9,873,179 | 12,174,792 |
| Profit before tax | 5,031,770 | 10,355,918 |
| Taxation | 1,509,531 | 3,106,775 |
| Profit after tax | 3,522,239 | 7,249,143 |

Statement of Financial Position of RIC Ltd and 5GCC Ltd as at 31st December 2022.

| Accounts description | RIC Ltd | 5GCC Ltd |
|----------------------------------|------------------|-------------------|
| | FRW (000) | FRW (000) |
| Non-Current Assets | | |
| Property Plant & Equipment | 7,500,000 | 18,900,000 |
| Intangible Assets | 794,000 | - |
| Total Non-Current Assets | 8,294,000 | 18,900,000 |
| Current Assets | | |
| Inventory | 486,000 | 736,800 |
| Accounts Receivable | 189,650 | 105,800 |
| Prepayments | 36,121 | 77,980 |
| Cash and Cash equivalent | 254,000 | 89,400 |
| Total current Assets | 965,771 | 1,009,980 |
| Total Assets | 9,259,771 | 19,909,980 |
| Non-Current Liabilities | | |
| Borrowings | 1,801,900 | 2,582,400 |
| Current Liabilities | | |
| Trade and other payables | 126,400 | 103,910 |
| Overdraft | 11,200 | 558,500 |
| Total Current Liabilities | 137,600 | 662,410 |
| Total Liabilities | 1,939,500 | 3,244,810 |
| Net Assets | 7,320,271 | 16,665,170 |
| Financed by: | | |
| Share Capital | 5,000,000 | 11,000,000 |
| Reserves | 975,400 | 1,798,800 |
| Retained Earnings | 1,344,871 | 3,866,370 |
| Owners' Equity | 7,320,271 | 16,665,170 |

Additional Information

1. The inventory valuation method by RIC Ltd and 5GCC Ltd is FIFO and LIFO respectively. The industry averages have been calculated using the FIFO method. All inventories should be valued under the FIFO method. The following are the inventory costs under different valuation methods:

Table4: Inventory valuation method

| | RIC Ltd | | 5GCC Ltd | |
|-----------------------|-----------|-----------|-----------|-----------|
| | FIFO | | LIFO | |
| | FRW (000) | FRW (000) | FRW (000) | FRW (000) |
| Opening Inventory-FRW | 193,300 | 245,200 | 284,300 | |
| Closing Inventory-FRW | 486,000 | 811,100 | 736,800 | |

2. Included in the RIC Ltd borrowings is a loan facility amounting to FRW 950 million which was acquired before the year end specifically for construction of a branch in Musanze. This branch is expected to start its operations in mid-2023. Its related finance costs amounting to 85 million has been accurately calculated and included in the finance costs and its related liability has been included in the trade and other payables.
3. It is 5GCC Ltd's policy to treat the overdraft facility above 15% of the total long-term liabilities as a 100% non-current liability.
4. Included in the operating costs is the depreciation expenses of RIC Ltd and 5GCC Ltd which has been calculated using the straight-line method of depreciation. To compare their results with that of the industry, a reducing balance method should be used for this particular year instead of a straight-line method of depreciation. The following is the depreciation as included in the above presented statement of profit or loss:

Table 5: Depreciation

| | RIC Ltd | 5GCC Ltd |
|---|-----------|-----------|
| | FRW (000) | FRW (000) |
| Depreciation for the year under straight line method | 3,750,000 | 4,050,000 |
| Depreciation for the year under reducing balance method | 2,250,000 | 4,590,000 |

5. 10% of sales have been made on credit for both companies
6. Credit purchases were FRW 500 million and 920 million for RIC Ltd and 5GCC Ltd respectively
7. Assume the year has 360 days.

Required:

- a) After making all necessary adjustments write a report which contains an appraisal of the performance and financial position of RIC Ltd and 5GCC Ltd against each other and also against the industry average (25 Marks)**
- b) Discuss key areas, with recommendations, that the management of RIC Ltd and 5GCC Ltd need to address to improve performance (5 Marks)**
- c) 5GCC Ltd business processes and corporate governance**

Five Generation Computer Corner (5GCC) Ltd has 400 employees including 300 machine operators and 100 office staff. Some operators are for organizing inputs before they are put in the machines for production, others are for counting the computers and accessories produced. while the rest are for operating machines which are used in the production process. 5GCC Ltd has 30 technicians who are responsible for the maintenance of the machines in the factory. The company has around 10 machines which need repairs, maintenance and checkup, regularly.

The office staff includes 20 marketing staff who are responsible for conducting a door-to-door marketing campaign within the city and 20 accounting staff who should ensure that all accounting transactions and budgets are prepared and checked regularly. The remaining 60 staff are split in other different departments like human resource where there are around 20 staff who are responsible for making employees attendance list in the morning and evening at the close of each business day.

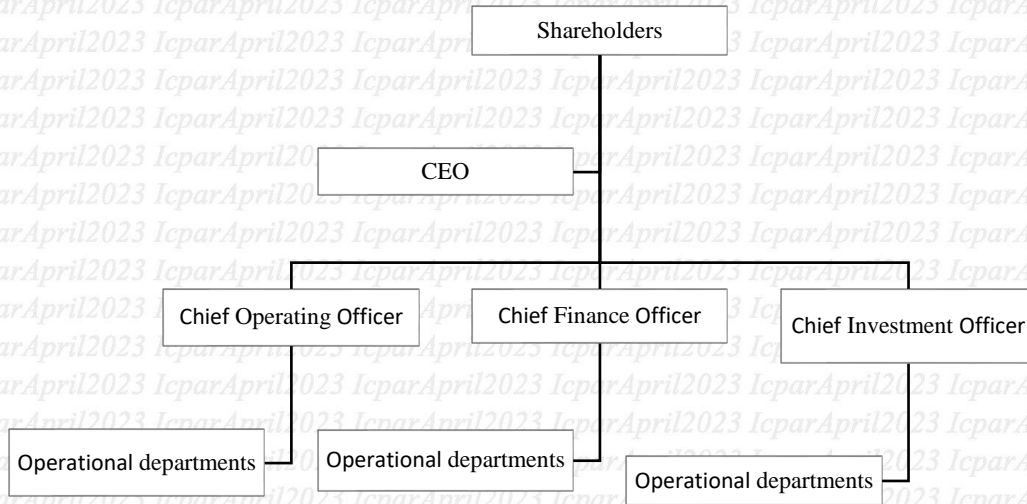
5GCC Ltd usually purchases inventory from different suppliers and stores them in the big stores which the company rents in the neighboring companies. The company is responsible for its stock security, cleaning and electricity. As a result, 5GCCSS Ltd has allocated some of its employees to ensure the hygiene of the stock is maintained and continually remove defects and obsolete inventory parts.

5GCC Ltd has several information systems such as the accounting information system, inventory monitoring system, human resource management system, where each system works independently, they are not linked. The company has no system in place to handle customer complaints as anyone who has a complaint has to come in person to the office and express his/her issue.

All company decisions are taken during the senior management meeting which occurs once in a trimester as the company has no operational board of directors. The company has no audit department but they are audited by an external auditor as part of tax compliance to file audited financial statements on annual basis.

Recently, Mr. Robert Cyamatare, the company CEO attended a CEOs dinner event organized by ICPAR, and they discussed about Business Process Re-engineering as a current trending business model that can be deployed for an efficient and effective resources allocation in a business including a discussion around the role of the board of directors to a company.

5GCC Ltd Organizational structure



Required:

- i) Critically analyze the current 5GCC Ltd business processes and discuss how the introduction of BPR can help them to improve performance (6 Marks)
- ii) Briefly discuss how BPR would affect the existing systems at 5GCC Ltd (4 Marks)
- iii) Critically evaluate the current organizational structure of 5GCC Ltd and discuss the impact of having such a structure (10 Marks)

(Total: 50 Marks)

SECTION B

QUESTION TWO

Kigali Foods Ltd is a manufacturing company operating in the Kigali Special Economic Zone for ten years. It is very known by its high-quality and delicious maize floor called Kaunga Njema. It produces and supplies countrywide and, in the region, especially in secondary schools and universities. Kigali Foods Ltd's operations department has two operating divisions: Planting and Grinding divisions which also have their respective divisional managers. Planting division's main task is to plant and harvest maize until they are ready for the market, while the grinding division is for processing the harvested maize into eatable and sellable maize floor. Planting division buys inputs for plantation from an external market but for the grinding division, they may buy inputs from planting division or buy them from an external market.

Divisions usually use market-based or full cost-plus transfer pricing methods to determine at which price different divisions should transfer inputs and outputs. Currently the transfer price is set by the individual division using market prices. The grinding division has full autonomy to choose where to outsource the inputs. Recently the grinding division received an offer from a newly established plant which is ready to offer the maize on a discounted price.

The following are the different input prices from the planting divisions and the external market in the last 4 months

| Months | Planting Division Price per 1 Kg FRW | External Market Price per 1 Kg FRW |
|---------------|---|---|
| March | 1,000 | 1,000 |
| April | 1,200 | 1,100 |
| May | 1,100 | 1,100 |
| June | 900 | 850 |

The above prices have been a topic of debate in the senior management meeting, wondering why the planting division charges higher prices to its sister division which is sometimes above the market prices. The chief finance officer advised that if the two divisional managers sit and agree on the fair transfer price between their divisions, it would be beneficial not only to their divisional performance but also to the whole organization.

Kigali Foods Ltd has the head of business unit, functional manager and a manufacturing manager. In addition to this, the company has the chief executive officer and a well operationalized board of directors. The company has different departments including finance, production, human resource and marketing departments. The company has many divisions and each divisional manager is rewarded based on their performance.

The company uses a traditional performance measure such as earnings or earnings growth where the actual performance is being compared against that of previous years to measure the growth.

The manufacturing manager is given an annual target and performance measures are tailored to particular circumstances though driven by the functional strategy.

Recently in the senior management meeting, the head of operations introduced the concept of Value-Based Management and emphasized its role in improving corporate performance towards value creation and improvement in shareholders' wealth. The senior management team borrowed her idea and decided to discuss it in detail in the following senior management meeting.

Required:

- a) Based on the idea of the Chief Finance Officer, **discuss the transfer pricing method to be adopted at Kigali Foods Ltd to resolve the existing transfer prices issues among the two divisions** (11 Marks)
- b) As the head of operations, **write a report to CEO, briefly discussing the implementation and the pitfalls of adopting a Value Based Management approach in Kigali Foods Ltd.** (8 Marks)
- c) **Discuss the potential effects which may arise when the grinding division opts to source its inputs from an external market including a foreign market** (4 Marks)
- d) **Briefly discuss the distinction between economic and managerial performance evaluation in the context of Kigali Foods Ltd.** (2 Marks)

(Total: 25 Marks)

QUESTION THREE

Sabyinyo International Tourism University (SITU)

Sabyinyo International Tourism University (SITU) is a well-known tourism university headquartered in Musanze but with three other campuses in Kigali, Rubavu and Nyanza District. SITU was established 10 years ago.

SITU has around 200 academic staff and 8,000 students across all campuses. The headquarter is responsible for all central activities including budgeting exercises. Its budgetary process is done on a quarterly basis, and the university set a team that is always involved in the budget preparation process. The team is composed of senior management members only. The budget execution report is submitted to the senior management on 15th of the month of each next quarter, while the final budget for the next quarter is submitted not later than 10th of the last month of the previous quarter.

The budget team is responsible for investigating the current inflation rates, which usually provides a basis to adjust the current quarter's budget and update the next quarter's budget. This has been practiced since university establishment and the management is fine with that approach. In the last two years, the former university director of finance wished to implement time series concept as a forecasting technique which would have to replace the current budgetary system, unfortunately he failed to convince management the rationale for this change.

The university has hired you as a financial analyst, one of your key responsibilities include budget preparation and analysis and you have been presented with the following two quarters of the year ended December 2022 budget for your analysis as extracted from SITU's management reports. During your induction, you were explained the budgetary process at SITU.

| Budget items | Quarter 1 | | | Quarter 2 | | |
|-----------------------------|------------------|------------------|-----------------|------------------|------------------|-----------------|
| | Budget | Actual | Variance | Budget | Actual | Variance |
| | FRW'00 | FRW'00 | FRW'00 | FRW'00 | FRW'00 | FRW'00 |
| | 0 | 0' | 0 | 0' | 0' | 0' |
| Revenues | | | | | | |
| Tuition fees | 520,000 | 291,720 | 228,280 | 551,200 | 309,223 | 241,977 |
| Training fees | 15,000 | 4,065 | 10,935 | 15,900 | 4,309 | 11,591 |
| Grants | 820,000 | 402,620 | 417,380 | 869,200 | 426,777 | 442,423 |
| Total | 1,355,000 | 698,405 | 656,595 | 1,436,300 | 740,309 | 695,991 |
| Expenditures | | | | | | |
| Publication fees | 9,805 | 10,393 | (588) | 10,393 | 11,017 | (624) |
| Data Collection costs | 21,100 | 24,476 | (3,376) | 22,366 | 25,945 | (3,579) |
| Data Analysis costs | 56,790 | 3,407 | 53,383 | 60,197 | 3,611 | 56,586 |
| Salaries | 1,124,321 | 1,219,888 | (95,567) | 1,191,780 | 1,293,081 | (101,301) |
| Repairs and maintenance | 80,500 | 79,695 | 805 | 85,330 | 84,477 | 853 |
| Travel expenses | 61,500 | 66,728 | (5,228) | 65,190 | 70,731 | (5,541) |
| Total expenditures | 1,354,016 | 1,404,587 | (50,571) | 1,435,256 | 1,488,862 | (53,606) |
| Net Revenues/(Costs) | 984 | (706,182) | 606,024 | 1,044 | (748,553) | 749,597 |

Required:

- Critically evaluate the current SITU's budgetary system and advise on how the implementation of Zero- Based Budgeting system would improve the university's budget performance (12 Marks)
- Briefly discuss the advantages and disadvantages of using time series as a forecasting technique (5 Marks)

c) Just More Than Beauty Co

Just More Than Beauty Co makes better quality lotion using three ingredients. The standard cost card of the month of July 2022 shows that one batch of lotion consists mainly of three ingredients: 0.2 Kg of mango butter, 0.4 Kg of hazelnut oil and 0.35 Kg of seed oil. Below is the price per kilogram of each ingredient:

| Ingredients | Price per Kilogram |
|--------------|--------------------|
| Mango butter | 20 |
| Hazelnut oil | 8 |
| Seed Oil | 6 |

The following production and sales data are made available:

| | Batches |
|---------------------|---------|
| Budgeted production | 140,000 |
| Budgeted sales | 140,000 |
| Actual Production | 152,000 |
| Actual sales | 152,000 |

The actual ingredients used were 35,010 Kg, 60,180 Kg and 43,100 Kg for mango butter, hazelnut oil and seed oil respectively.

Required:

Calculate and comment on the material mix and material yield variance of Just More Than Beauty Co for the month of July 2022 (8 Marks)

(Total: 25 Marks)

QUESTION FOUR

Pismelo Company has been established by the government to manufactures two types of products: Product X and Product Y. It is wholly owned by the government. Pismelo Company forecasted the total manufacturing overheads to be FRW 261,780 during the current period. The current company policy is to allocate overheads to products on the basis of direct labor hours. Below is the data regarding the current period's operations:

1. Pismelo Company budgeted volume of production is 800 Units and 2,400 Units for product X and product Y respectively,
2. Direct labor hours per unit of product X and Product Y is 1.40 Hours and 2.40 hours respectively,
3. Direct material cost per unit of product X and product Y is FRW 21.40 and FRW 33.40 respectively,
4. Direct labor cost per unit of product X and product Y is FRW 22.40 and FRW 38.40 respectively

During last month, Pismelo Company hired a new Finance Manager, and he is considering using Activity-Based Costing (ABC) to apply manufacturing overhead costs to products for all their external financial reports. He suggested that the ABC system would have the following cost pools:

| Activity Cost Pool | Activity Measure | Product X | Product Y | Overhead Cost |
|-----------------------|---------------------------|-----------------|-------------------|----------------|
| Purchase Orders | Number of purchase orders | 1,620 orders | 2,540 orders | 183,040 |
| Machine setups | Number of setups | 200 set ups | 260 set ups | 27,140 |
| General Factory | Direct labor hours | 560 labor hours | 2,880 labor hours | 51,600 |
| Total Overheads costs | | | | 261,780 |

Required:

- a) Compute a predetermined overhead rate under the current method and determine the unit product cost of each product. (5 Marks)
- b) Compute the unit product cost of Product X and Product Y using the Activity Based Costing System. (9 Marks)
- c) Briefly discuss how ABC system could help an organization like Pismelo Company to identify, allocate and control costs and the potential challenges it may face. (3 Marks)

d) Pismelo Company recently encountered challenges from foreign competitors' companies that pay lower wages yet they have more modern and more efficient production equipment. This contributed to competitors' products becoming more competitive in terms of lower prices on the market place. As a result, the company's management is seeking ways to cut costs without reducing quality. Pismelo Company is considering to introduce a profit-sharing payment scheme whereby its workers would receive a share of profits in profitable years. The workers gave up a wage increase to obtain this profit-sharing scheme.

Required:

Discuss the advantages and disadvantages of giving the workers a profit-sharing bonus instead of a wage increase (8 Marks)

(Total: 25 Marks)

End of question paper.

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