CERTIFIED PUBLIC ACCOUNTANT

FOUNDATION LEVEL 2 EXAMINATIONS

F2.1: MANAGEMENT ACCOUNTING

FRIDAY : 06 DECEMBER 2019

INSTRUCTIONS:

1. **Time Allowed: 3 hours 15 minutes** (15 minutes reading and 3 hours writing).
2. This examination has **seven** questions and only **five** questions are to be attempted.
3. Marks allocated to each question are shown at the end of the question.
4. Show all your workings

QUESTION ONE

Kilimanjaro company sells clothes for different categories of people. Most of the clothes are sold on local market (Rwanda) and are known on the name "made in Rwanda". As management accountant you are provided with the data for the preparation of operating statement.

Budgeted sales and production for the month of November 2019 are 200 units.

<u>Standard cost for each unit of product</u>		<u>Frw</u>
Direct material	10kg @Frw 50/kg	2,650
Direct labour	15 hrs @ Frw 9/hr	135
Variable overhead	10 hrs @ Frw 0.5/hr	50
Fixed overhead	10 hrs @ Frw 10/hr	100
Selling price		1,000

<u>Actual data for the month of November 2019</u>

Production	190 units sold at Frw 1.150 each unit
Direct material	580 kgs @ Frw 15,000 (total cost)
Direct labour	3,000 hrs @ Frw 5/hrs, this includes 400 hrs noted as idle.
Fixed overhead	Frw 12,000
Variable overhead	Frw 1,500

REQUIRED:

By using the calculated variances prepare the reconciliation operating statement for the month of November 2019. **(14marks)**

b) Nyaruguru Tea Factory processes tea green leaf from farmers and supports farmers by providing inputs at the lowest possible price. To achieve this, the company implements Zero Based Budgeting. In the next tea planting season, they plan to plant tea on 250 hectares, and each hectare requires 14,000 seedlings on a well prepared land. The following assumptions have been prepared by the Finance Manager and were agreed upon during the management meeting.

Assumptions:

- Exchange rate $1=Rwf 920
- Fertilizer required 27,000 kg and 30% of this will be used in tea nursery development, the rest will be sold to farmers. The company charges a mark-up of 5% on all inputs sold to farmers.
- Fertilizer application in tea nurseries amounted to Rwf 900,000
- Recruitment of 8 workers with a gross amount of Rwf 100,000 per month, all employees'statutory deductions inclusive.
- Death rate of 10%. The company assumes that 10% of the prepared seedlings will die during the 12 months of maintenance and the company pays Rwf 5 per cutting. one cutting is used to develop one seedling

  The company contracted Munini Tea Cooperative to maintain its tea nurseries, the tubing and sheeting are included in the contract amount of Rwf 140,000,000.
- The Rwandan fertilizer accepted to sell to Nyaruguru Tea factory NPK fertilizer at $0.5/kg payable in advance.

REQUIRED:

Calculate the total costs required to develop the tea nurseries. **(6 marks)**

(20 marks)

QUESTION TWO

a. Mr. Eddy started a company called Eddy Ltd that operates a shop with different products. Up to November 2019 he was not making profit. He approached you as a management accountant expert to know when he will be making profit. The following information were availed to you for the support.

• Total sales	Rwf 800,000,000
• Total units	Kgs 40,000,000
• Variable cost	Rwf 400,000,000
• Fixed cost	Rwf 70,000,000

REQUIRED:

(i) Calculate the breakeven point in value and the sales volume he would sale to break even. **(6 marks)**

(ii) He wishes to make a profit of Rwf 20 million, advice with the help of calculation, how much to sell in order to earn this profit. **(3marks)**

(iii) Calculate the margin of safety if the actual sales is Frw 9,250,000. **(3 marks)**

b. Mr Eddy has attended the investors meeting and some of them opted to use a bonus scheme to their staff. Enumerate four (4) advantages and four (4) disadvantages of a group bonus scheme to Mr. Eddy in his business. **(8 marks)**

(20 marks)

QUESTION THREE

Kadogo company Ltd (KC Ltd) provides goods to its clients in Kigali. It purchases these Goods (beans, Rice, and sweet Potatoes) in Ruhengeri and re-sale them in Kigali. It has been approached by Mr Murenzi who wishes to bring in his shop located at kimihurura of 300 kgs of sweet potatoes and 400 kgs of beans. KC ltd is keen on contracting this service and wish to be competitive so that Mr Murenzi do not give it to Mr kazungu who is a competitor in the business. The following information were revealed by KC ltd in relation to this contract

- Two cars will be required. Each car is rented Frw 150,000 per trip, sweet potatoes will be carried in 5 trips while beans is 6 trips, each car cost Rwf 70,000 of fuel per trip. KC Ltd has one car and currently is not in use. It will be used for beans transportation. The rental cost includes fuel and a driver.
- Each car driver is paid normal salary of Frw150, 000 per month. However, when he is going to have a trip out of Kigali is paid an indemnity of Frw 20,000 per trip.
- Cost of beans is Frw 250/kg while sweet potatoes is Frw 150/kg at Ruhengeri
- Every driver needs to communicate with KC ltd head office, KC ltd driver uses telephone which was bought Frw100,000 last year
- The company will need 700 bags to fill in the goods. These bags are already in store and were bought at Rwf 40 each last year. The cost of the bags increased by 10% this month.

Required:

i. Determine the relevant cost and the minimum cost of the contract. **(10 marks)**

ii. Explain why you included or excluded each cost in the contract price. **(10 marks)**

(20 marks)

QUESTION FOUR

a. Kacyiru stock company Ltd (KSC ltd) operates stock management. Goods are produced from Europe and America. The director of finance (DF) has provided to you as storekeeper the following information.

- On 2nd February he brought in stock of 24 units @ Frw 100 each
- On 22nd February he purchased 20 units @ Frw150 each
- On 23rd Feb he sold 10 units
- On 1st March he again sold 15 units
- On 15th March he purchased 30 units @ Frw 250 each
- On 20th March he sold 15 units
- On 5th May he purchased 20 units @ Frw 180 each
- On 30th May he sold 3 units

Prepare the store ledger card using LIFO method for the last 5 months up to 31st May 2019.

(12 Marks)

b. KSC Ltd want to keep inventory cost at a possible minimum cost. Total raw materials are 30,000 units at Frw 24 each. Other inventory associated costs are :

- Ordering cost Frw 12 per order
- Holding cost Frw 2 per unit / year

REQUIRED

i. Using economic order quantity, calculate the total inventory cost. **(4 marks)**

ii. Determine four (4) factors to be considered in determination of maximum stock level.

(4 Marks)

(20 marks)

QUESTION FIVE

Kigali Arena Hotel (KAH) is a new hotel located in Gasabo district, Rwanda. It offers hotel services which include restaurant, sports, hostel etc. The Managing Direct of KAH has been approached by Radisson Blu to manage its hotel and offer the management fees in return. The Managing Director of KAH has provided to you the following information in regard to this offer. He wants to know if this service is made internally would be beneficial than being outsourced.

If made internally

	Sports	restaurant	rooms
	Frw (M)	**Frw(M)**	**Frw (M)**
- Direct material cost	14	7	3
- Direct labour cost	4	2	4
- Other cost	3	1	2
- Revenue	30	12	9
- Fixed cost	2	2	3

(Figures are in million)

If outsourced, the following are the quoted management fees that KAH would pay to Radisson blu.

	Frw (M)
- Sports	22
- Restaurant	14

(Figures are all in million Rwandan francs/Frw)

However, for the rooms, the contract states that Radisson will provide to KAH a fixed sum of 4 million. The revenue that Radisson will collect in the rooms will not be accounted to KAH.

REQUIRED:

a. Advise KAH whether to continue to make and provide these services internally or getting into contract with Radisson blu. Note that if services are provided by Radisson blu, the fixed cost will also be covered. **(15 marks)**

b. Discuss Five (5) factors that needs to be considered by KAH before hiring the services from Radisson blu. **(5 marks)**

(20 marks)

QUESTION SIX

Gitega company produces three products; X, Y and Z, and uses similar materials. Previously, the company has been using traditional absorption costing method to allocate overheads to its products. The company wants to go with the modern environment and adopt the new method, activity based costing. The financial data for the financial year ended 31/12/2018 are as follows:

	X	Y	Z
- Total sales (units)	30,000	24,000	36,000
- Selling price /units(Frw)	15	24	26
- Raw materials (kg/units)	4	6	8
- Direct labour hours /units	0.1	0.2	0.5
- Machine hours / unit	0.2	0.4	0.5
- Number of production runs	32	20	10
- Number of suppliers order	48	30	50
- Number of sales to wholesalers	70	40	40

The overhead costs were as follows:	**(Frw)**
- Machine set up costs	35,000
- Machine running costs	10,000
- Supplies order costs	25,000
- Sales to wholesales costs	40,000

The cost of raw materials was Frw 4 per kg and the direct labour cost was Frw 15 per hour. This is applicable to all products.

REQUIRED:

i. Calculate the cost per unit for all products using both ABC and tradition all method. **(10marks)**

ii. Explain four (4) reasons why ABC may be preferred to traditional absorption costing **(4 Marks)**

iii. Discuss three (3) assumptions of marginal costing. **(6marks)**

(20 marks)

QUESTION SEVEN

During the ICPAR annual seminar and the 10th universally which took place at Serana kivu Hotel, there was an argument on the budget preparation. Some of the people who attended were from public and others from private sector. Public sector staff stated that incremental budget is no longer usable while others said that it should always be used instead. Some from private sector stated that budget is not needed, a just in time approach can resolve all the issues in budgeting.

a. Discuss issues that can rise during the budget preparation in public compared to private sector. **(8marks)**

b. Explain four (4) problems associated with the use of expected value in budget preparation. **(8marks)**

c. Explain the term incremental budgeting and zero-based budgeting. **(4marks)**

(20 marks)