INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS OF RWANDA
Driving Sustainable Performance

Associate of IFAC

CERTIFIED PUBLIC ACCOUNTANT

ADVANCED LEVEL 2 EXAMINATIONS

A2.2: STRATEGIC PERFORMANCE MANAGEMENT

FRIDAY: 12 JUNE 2015

INSTRUCTIONS:

1. **Time Allowed: 3 hours 45 minutes** (15 minutes reading and 3 hours 30 minutes writing).
2. This examination has one case study
3. Show all your workings

CASE STUDY

Kigali Ventures is a holding company of diversified investments featuring a service company dealing in delivery of parcels, banking specializing in mortgages, car assembling and a multi-divisional company operating in several countries.

About parcels delivery company (Gatumwa Company)

Gatumwa Company specialises in delivery of parcels whereby a worker is paid Frw 9,000 per hour and can produce two parcels an hour. Each parcel uses material and paper costing Frw 10,000 and incurs a variable overhead cost of Frw 7,000 per hour. Each parcel sells for Frw 30,000. At present, owing to the adverse economic conditions and limited communication, work is rather slack and three of the company's employees are occupied in carrying out extensive repairs to its other general work elsewhere.

The company also owns a warehouse next to the parcel factory, which has been used as a factory store in the past. Today it is set to be let out on a renewable annual lease of Frw 6 million for storage to Umoja Enterprises.

A new service related company which specializes in the making of sewing machines has asked the company if it would take on a Frw 300 million contract, which will be initially for a year, to make special shining sewing machines.

Gatumwa Company estimates that the work would take 13,200 hours, or the work for five men a year and that variable overheads would be Frw 100 million. The work could be carried out in the factory, but because of the large amount of space needed it would have to displace 9,600 hours of existing work. **Gatumwa Company** estimates that the material required for the contract would cost Frw 60 million.

Alternatively the work could be carried out in the warehouse; the lease is due to be renewed next December anyway. **Gatumwa Company** believes this would incur an extra cost of Frw 3 million for heating and the cost of power would be increased by Frw 5 million. The company will have to hire two new workers and pay them Frw 22 million each per annum. The other three men would be those presently involved in carrying out extensive repairs to its other general work elsewhere. These are paid Frw 77 million per annum in total and it would cost Frw 25 million to get an outside contractor to finish the extensive repairs to its other general work elsewhere.

Requirement for the Case of Gatumwa Company

(i) Advise the company on whether to accept the contract. The advice should be supported by relevant computations. **(25 Marks)**

(ii) What would be the longer-term implications of the decision in (i) above to **Gatumwa Company** business? **(10 Marks)**

About the banking company (Housing Bank of Kabuga)

This bank is head quartered in Kigali and the head office contains the administrative centre as well as the central publication section and the central computing unit. The bank operates two divisions, mortgage lending and savings. The bank has a number of branches operating as autonomous profit making units. Branch income is determined by the branch at which savings accounts are held, or from where lending is initiated.

It is the responsibility of the strategic performance management manager to calculate the product costs which will help determine profitability and also be used as a possible basis for setting future prices. The current product costing system operating within the branch network has proven itself reasonably reliable and fairly accurate in the past within its limitations. However, branch overhead costs have been rising rapidly and are now becoming a cause for concern, and senior management are looking for ways to save money, one of these being the possible closure of some branches.

The bank uses the traditional volume measure of direct labour hours to absorb overheads which has been criticized by the chief Finance Officer, who says it does not give clear indication of product profitability. The Chief Finance Officer has asked you to investigate the introduction of a new product costing system throughout the bank using the mortgage lending division as a pilot study to support your analysis.

The bank offers three types of mortgage, a standard repayment, a repayment with a fixed interest rate, and a low start whereby the interest repayment rate stats at a low level and increase throughout the life of the mortgage in line with people's salary increases as they progress on their career paths.

To help your explanation you will present the calculation of product costs for the mortgage lending division. The results of your initial investigation relating to the mortgage lending division are detailed below. You are required to use this data to complete your calculations.

Budget for the financial year ending 30 June 2014

Mortgage type	**Direct costs per loan**	**Direct branch labour hours**	**Expected number of new loans**
Repayment	Frw 265,000	1	30,000
Fixed Rate	Frw 255,000	3	60,000
Low Start	Frw 295,000	4	10,000

Analysis of mortgage lending activities

Mortgage type	**Forms processed Per loan**	**Number of brochures Printed per year**	**Credit investigations Per loan**	**Computer database Entries per loan**
Repayment	5	200,000	5	20
Fixed Rate	6	300,000	4	10
Low Start	9	500,000	6	30

Budgeted total overhead for the mortgage lending division for the year ending June 2014

Central Computing	Publications Section	Central Processing	Credit Investigations
Frw 1,500,000	Frw 2,000,000	Frw 1,000,000	Frw 1,750,000

Requirement for the Case of Housing Bank of Kabuga

a) Calculate the product costs for each type of mortgage using the absorption costing method as currently employed and using a more accurate and detailed method of overhead allocation **(18 Marks)**

b) Having completed your analysis, the Chief Finance Officer has asked for recommendations as a result of your findings. You are required to prepare a brief repot addressing the following questions:

(i) What advantages will Activity Based Costing (ABC) brings to the bank?

(ii) If adopted, how will ABC be implemented **(7 Marks)**

About car assembling (Trimake Ltd)

Trimake Ltd is a car manufacturer. The company intends to introduce a new model of a car known as Neon.

The NEON:

- Dual airbags and a powerful engine for a small car.
- Has a relatively short development time.
- Is environmentally friendly built using recyclable and non-toxic materials.

The NEON is produced by skilled workers assembling a variety of components. Production overheads are currently absorbed into product costs on an assembly labour hour basis.

Trimake Co is considering a target costing approach for its new digital radio product.

A selling price of Frw 5,720,000 has been set in order to compete with similar cars on the market that has comparable features to the NEON. It has been agreed that the acceptable margin (after allowing for all production costs) should be 20%.

Production of the car will require resources as follows:

1. **Component 1 (Engine)** Each car will require component one. These are bought in and cost Frw 533,000 each. They are bought in batches of 4,000 and additional delivery costs are Frw 312,000,000 per batch.
2. **Component 2** in an ideal situation 25 Kilogrammes of the component is needed for each completed car. However, there is some waste involved in the process as some components are damaged in the assembly process. Trimake Ltd estimates that 2% of the purchased component is lost in the assembly process. The component costs are expected to be Frw 650 per kilogramme to buy.
3. Other materials Other materials cost Frw 1,053,000 per car.
4. Assembly labour these are skilled people who are difficult to recruit and retain. Trimake Ltd has more staff of this type than needed but is prepared to carry this extra cost in return for the security it gives the business. It takes 109.2 hours to assemble a car and the assembly workers are paid Frw 7,500 per hour. It is estimated that 10% of hours paid to the assembly workers is for idle time.

5. Production Overheads– recent historical cost analysis has revealed the following production overhead data:

	Total production overhead Frw	Total assembly labour hours
Month 1	80,600,000	4,149,600
Month 2	91,000,000	5,023,200

6. Fixed production overheads are absorbed on an assembly hour basis based on normal annual activity levels. In a typical year 52,416,000 assembly hours will be worked by Trimake Ltd.

Requirement for the case of car assembling at Trimake Ltd

(a) Briefly describe the target costing process that Trimake Ltd should undertake. **(2 Marks)**

(b) Explain the benefits to Trimake Ltd of adopting a target the costing approach in (a) at such an early stage in the product development process. **(3 Marks)**

(c) Assuming a cost gap was identified in the process, outline possible steps Trimake Ltd could take to reduce this gap. **(2 Marks)**

(d) Calculate the expected cost per unit for the car and identify any cost gap that might exist. **(18 Marks)**

(Total 25 Marks)

About multi-divisional company (Majimbo Ltd)

Majimbo Ltd is a multi-divisional company operating in several countries. Division X wants to buy components for its final product. Suppliers outside Majimbo Ltd have given two bids for Frw. 30,000 and 31,800. The supplier who bid Frw. 31,800 will in turn buy some raw materials for Frw. 4,500 from Division Z of Majimbo Ltd. which has spare capacity that will increase the contribution to overall company profits by Frw.3,000. The supplier who bids Frw. 30,000 will not buy any materials from Majimbo Ltd.

Requirement for this case of multi divisional company

Suppose Division Y is working at full capacity and can provide the needed part to Division X or to an outside customer at an assumed market price of Frw.31,800. If market pricing were the rule, division Y would have to meet the Frw.31,800 bid. Further, assume that the outlay costs to Y of filling the order were Frw. 22,500.

a) Will the use of Frw. 31,800 as a transfer price lead to optimal decisions for Majimbo Ltd? Show the net effects on cash flows. **(10 Marks)**

b) What is the minimum transfer price (inclusive of the opportunity cost)? **(5 Marks)**

(Total 100 Marks)

End of question paper

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