



### CERTIFIED ACCOUNTING TECHNICIAN

## LEVEL 2 EXAMINATIONS

# **L2.3: MANAGEMENT ACCOUNTING**

**TUESDAY: 4 JUNE 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**

- (a) Explain any **two** merits and **two** demerits of adopting a centralised purchasing system in an organisation. (4 Marks)
- (b) Gasabo Distillers Limited (GDL) located in Kigali produces and sells premium wine. It uses molasses as raw material which it buys from local suppliers. It uses the weighted average cost method to value inventory and the closing inventory as at 30 April, 2019 was 1,200 kg valued at Frw 1,776,000.

GDL's procurement manager has provided the following information about raw material movements for the month of May 2019.

Date	Purchases	Price per kg	Issues
May	kg	Frw	kg
2	4,500	1,500	
7			3,000
12	1,400	1,450	
15			2,000
21	1,700	1,520	

On 22 May, 2019 the production department returned 800 kg of molasses which were over supplied on 15 May, 2019.

On 31 May, 2019 GDL returned 700 kg of molasses to one supplier being part of materials purchased on 21 May, 2019.

#### **REQUIRED:**

Prepare a stores ledger card for GDL for the month of May 2019 and show the value of closing inventory. (*Hint: Round off all figures to whole numbers*) (11 Marks)

(c) Ntarugera Limited (NL) is a renowned soft drinks company located in Ruhango district. The company produces and sells a variety of soft drinks including Coke-Kola and Fanfa orange. The Cost Accountant at Ntarugera Limited has provided the following production data relating to the two products for the month of May 2019.

	Coke-Kola	Fanfa orange
Budgeted hours per batch	1.8	1.9
Budgeted production(batches)	4,000	2,800
Actual production(batches)	3,800	3,000
Actual hours	6,650	5,730

Each batch comprises of 100 crates of 24 bottles each and Ntarugera Limited uses its regional distributors all over the country to sell its soft drinks to the final consumers.

#### **REQUIRED:**

Determine the following control ratios for Ntarugera Ltd for the month.

(i) Capacity. (2 Marks)

(ii) Activity. (2 Marks)

(iii) Efficiency. (1 Mark)

(Total 20 Marks)

#### **QUESTION TWO**

- (a) Explain any **three** differences between marginal costing and absorption costing techniques. (6 Marks)
- (b) Kabera Textiles Limited (KTL) makes dresses which are sold to both medium and high income earners. Recently, the management of KTL became concerned over the ever increasing production costs and has tasked the chief finance officer to devise strategies to curb the rising cost.

The Chief Finance Officer has, however, advised that it is only the variable production costs over which KTL can have control as the fixed costs do not depend on the activity levels.

Extracts from the management accounts of KTL for the period January to May 2019 revealed the following production and cost data.

Month	Output (dresses)	Total cost (Frw '000')
January	6,000	32,660
February	7,100	36,180
March	6,800	35,220
April	6,920	35,604
May	7,050	36,020

#### **REQUIRED:**

- (i) Using the least squares method, estimate KTL's production cost for the month of June 2019 when planned output is 8,000 dresses. (10 Marks)
- (ii) Explain any **four** objectives of a cost accounting system in an organisation.

(4 Marks)

(Total 20 Marks)

#### **QUESTION THREE**

- (a) Explain any **four** objectives of preparing budgets in organisations. (4 Marks)
- (b) Mutesi Millers Limited (MML) processes maize into Maize flour that is packed in standard size packets of 1 kilogramme (kg) per packet. Their budgeted and actual information for the month of May 2019 has been provided as below:

Particulars	Budgeted	Actual
Sales:		
Sales units (tonnes)	1,200	1,230
Sales revenue (Frw '000')	300,000	301,350
Maize grain:		
Purchases (tonnes)	1,320	1,353
Total purchases (Frw '000')	264,000	263,835
Maize grain usage (tonnes)	1,212	1,260
Labour:		
Wage rate per hour (Frw)	2,200	2,250
Labour hours per tonne	20	18

Each tonne of maize flour and maize grain is equivalent to 1,000 kg and all that is produced is sold. Management is in the process of evaluating its performance for the month.

#### **REQUIRED:**

Determine the following variances for MML for the month:

(i)	Sales price	(2 Marks)
(ii)	Sales volume	(2 Marks)
(iii)	Materials price	(2 Marks)
(iv)	Material usage	(2 Marks)
(v)	Labour rate	(2 Marks)

- (c) (i) Distinguish between differential costs and sunk costs. (2 Marks)
  - (ii) Keza Metal Works Limited (KMWL) produces metal lock components required for production of doors and windows internally and purchases the rest of materials externally. KMWL currently produces 3,000 metal lock components per quarter to meet internal demand.

Their cost accountant has provided the following information regarding the company's total costs of metal lock components per quarter:

Particulars	Frw '000'
Direct materials	10,500
Direct labour	9,000
Variable production overheads	4,500
Fixed production overheads	7,500
Administrative overheads	<u>5,250</u>
Total	36,750

KMWL has been contacted by a supplier who is willing to supply metal lock components at Frw 12,000 per component.

KMWL's cost accountant has revealed that if KMWL accepts the offer, all direct material, direct labour and variable over head costs will be avoided and fixed production costs will reduce by Frw 2,500,000 while administrative overheads will remain constant for the quarter.

#### **REQUIRED:**

With relevant computations, advise the management of KMWL on whether to buy or continue making metal lock components internally. (4 Marks) (Total 20 Marks)

#### **QUESTION FOUR**

(a) (i) Explain any **four** features of job costing.

(4 Marks)

- (ii) Explain any **two** arguments for and **two** arguments against the adoption of activity-based costing in an organisation. (4 Marks)
- (b) Kanza Furniture Works Limited (KFWL) produces furniture products to both local and foreign customers. They produce furniture on order although samples are produced for display purposes. They have received an order from Mukunzi Group of Hotels (MGH) to supply 200 boardroom tables to all its hotels all over the country.

It has been established that production is carried out in three departments namely Machining, Assembling and Finishing. Based on experience, the following costs are expected to be incurred to complete the Job.

	Department		
Standard requirements per table:	Machining	Assembling	Finishing
Direct materials (Frw)	400,000	320,000	280,000
Wage rate per hour (Frw)	62,500	50,000	100,000
Variable overheads (Frw)	120,000	200,000	80,000
Direct labour hours	4	3	2

Total fixed production overheads are expected to be Frw 40 million and it is KFWL's policy to charge customers at full cost plus 15% markup.

#### **REQUIRED:**

Determine KFWL's expected total profit from the job order received from Mukunzi Group of Hotels. (8 Marks)

(c) Explain any **two** merits and **two** demerits of interlocking accounts. (4 Marks) (Total 20 Marks)

#### **QUESTION FIVE**

(a) Explain any **four** features of process costing.

(4 Marks)

(b) Kwachum Bakery Limited (KBL) produces cakes which pass through two processes to completion. The cakes are of a standard size of 2 kilograms (kg) each. The major raw material for these cakes is wheat flour and this constitutes the direct material while other ingredients are treated as production overheads. During the month of January 2019, 25,000 kg of wheat flour valued at Frw 1,250 per kg were introduced to Process 1. The output and cost data for the two processes is provided below:

	Process 1	Process 2
Output (kg)	23,000	19,700
Additional materials (Frw '000')	2,250	1,875
Direct labour Frw '000'	1,500	1,000

KBL provides for normal loss at 10% for each process, and each scraped cake is sold at Frw 125 and Frw 200 for process 1 and 2 respectively while variable production overheads are absorbed at Frw 50 per unit of output.

#### **REQUIRED:**

Prepare for KBL:

(i)Process 1 account(5 Marks)(ii)Process 2 account(6 Marks)(iii)Normal loss account(3 Marks)

(c) Explain the term 'equivalent units' and show how it is determined under process costing.

(2 Marks)

(Total 20 Marks)

#### **QUESTION SIX**

(a) Explain the following control instruments and show how they are used in computation of gross wages for employees.

(i)Piecework card.(2 Marks)(ii)Job card.(2 Marks)(iii)Clock and time cards.(2 Marks)

(b) Ganza Limited (GL) is an assembling company for refrigerators and washing machines. The company has 10 sales executives who sell the company's electronic appliances throughout the country. These sales executives are paid a commission of Frw 11,250 and Frw 8,500 for every refrigerator and washing machine sold respectively. Each sales executive is also paid a monthly wage of Frw 150,000.

During the month of February 2019 a total of 140 Refrigerators and 80 Washing machines were sold by the sales executives.

#### **REQUIRED:**

Determine the total labour cost incurred by Ganza Limited for the month of February 2019. (3 Marks)

(c) Golden Painters Limited (GPL) is a painting company located in Kigali. The company has received an order from Virunga Secondary School (VSS) to paint its students' residential hall, which occupies approximately 2,000 square meters. The standard unit cost information for GPL has been provided below:

Cost element	Frw
Weather Guard paint (per litre)	20,000
Direct labour hours (per hour)	8,000
Overheads (per direct labour hour)	450

It has been established that for every 5 square meters, 2.5 litres of paint and 30 minutes of direct labour hours will be required. The management accountant has indicated that it is company policy to set selling prices at cost plus 25% mark-up.

#### **REQUIRED:**

Determine the total revenue that GPL will realise from delivering the painting service to Virunga Secondary School. (5 Marks)

(d) Bisengimana is a sole proprietor who makes a variety of concrete products. The following information relates to the month of December 2018

Actual information:

Output (pavers)	8,500
	Frw
Direct materials	85,000,000
Direct labour (Frw 40,000 per hour)	54,000,000
Overheads	45,050,500

Budget information:

Output (pavers)	8,000
Direct labour hours	1,200
Overheads ('Frw '000')	40,800

Bisengimana absorbs overheads basing on direct labour hours.

#### **REQUIRED:**

(i) Determine the over or under absorption of overheads for December 2018.

(4 Marks)

(ii) Outline any **two** causes of over and under absorption of overheads. (2 Marks) (Total 20 Marks)

#### **QUESTION SEVEN**

- (a) Explain any **three** ethical responsibilities of a management accountant. (6 Marks)
- (b) Huye Foam Limited (HFL) is a manufacturer of mattresses. The company has two production departments and two service departments. Cost data for the month of May 2019 for the departments is provided below:

	Production departments		Service departments	
	Dept. 1	Dept. 2	Quality control	Packaging
Primary costs (Frw '000')	69,000	12,000	10,000	5,700
Number of employees	75	15	18	12
Area in square metres	2,700	600	900	800
Kilowatts	19,600	4,200	2,800	1,400

The service departments costs are apportioned to other departments based on the following percentages:

	Dept. 1	Dept. 2	Quality control	Packaging
Quality control	60%	20%	-	20%
Packaging	20%	50%	30%	-

It is company's policy to apportion service department costs to the production departments using a repeated distribution method.

Note: Apportion service department costs up to a minimum of Frw 500.

#### **REQUIRED:**

- (i) Prepare for Huye Foam Limited a secondary cost analysis sheet. (10 Marks)
- (ii) Explain any **two** reasons why overhead costs need to be classified into fixed and variable costs. (4 Marks)

  (Total 20 Marks)