

# CERTIFIED ACCOUNTING TECHNICIAN STAGE 3 EXAMINATIONS

# **S3.2: MANAGEMENT ACCOUNTING**

**DATE: THURSDAY28, AUGUST 2025** 

## **INSTRUCTIONS:**

- 1. Time allowed: 3 hours.
- 2. This examination has three sections: A, B and C.
- 3. Section A has 10 multiple choice questions equal to 2 marks each.
- 4. Section B has 2 questions equal to 10 marks each.
- 5. Section C has **3 questions** equal to **20** marks each.
- 6. All questions are compulsory.
- 7. The question paper should not be taken out of the examination room.

S3.2 Page 1 of 8

## **SECTION A**

## **QUESTION ONE**

## Which of the following states the responsibility of the manager of a profit centre?

- A. Responsibility for costs but not revenues
- B. Responsibility for revenues and costs
- C. Responsibility for revenues, costs and investment
- D. Responsibility for revenues but not costs

(2 Marks)

## **QUESTION TWO**

## Which one of the following conventionally explains variable costs?

- A. Vary per unit of output as production volume changes
- B. Vary in total from period to period when production is constant
- C. Be constant per unit of output
- D. Be constant in total when production volume changes

(2 Marks)

## **QUESTION THREE**

You have been provided with the following information regarding Huye Ltd for the year ended 31<sup>st</sup> December, 2024.

		<b>Production Units</b>	Total Cost (FRW)
	1	16,000 Units	400,000,000
ĺ	2	6,000 Units	300,000,000

## Calculate the total cost of producing 8,000 units using High Low Method

- A. FRW 240,000,000
- B. FRW 320,000,000
- C. FRW 10,000
- D. FRW 80,000,000

(2 Marks)

## **QUESTION FOUR**

The actual sales for year ended 31<sup>st</sup> December, 2024 is FRW 164,000. The seasonal adjustment for the same period is - 2,000.

## Using Additive model, calculate the trend for the year 2024.

- A. FRW 162,000
- B. FRW 164,000
- C. FRW 166,000
- D. FRW 168,000

(2 Marks)

## **QUESTION FIVE**

At the start of the year, a company owns a machine which originally cost FRW 55,000,000 and on which, accumulated depreciation was FRW 32,500,000. During the year, the machine is sold, giving

S3.2 Page **2** of **8** 

rise to a loss on disposal of FRW3,750,000. The company has a policy of not charging depreciation on non-current assets in the year of disposal.

## What cash proceeds were received on disposal of the machine?

- A. FRW 22,500,000
- B. FRW 28,750,000
- C. FRW 18,750,000
- D. FRW 26,250,000

(2 Marks)

#### **QUESTION SIX**

Zuri Ltd has provided the following data to aid in preparation of functional budgets: The products are sold in the ratio of 2:1 for Chairs and Tables respectively. The selling price for each product is FRW 50,000 for each chair and FRW 80,000 for each table. The total sales value for tables and chairs is FRW 720,000,000.

#### What is the total sales value of tables?

- A. FRW 400,000,000
- B. FRW 640,000,000
- C. FRW 200,000,000
- D. FRW 320,000,000

(2 Marks)

#### **QUESTION SEVEN**

A company makes and sells four products. Direct labour hours are a scarce resource, but the company is able to sub-contract production of any products to external suppliers. The following information is relevant.

	A	В	C	D
	Frw / Unit	Frw / Unit	Frw / Unit	Frw / Unit
Sales price	10,000	8,000	12,000	14,000
Variable cost	8,000	5,000	8,000	12,000
Cost of external purchase	9,000	7,100	10,000	13,000

	A	В	C	D
Direct labour hours per unit	0.1	0.3	0.25	0.2

In what order of priority should the company make these products in-house, rather than purchase them externally?

A. A, B, C, D

B. A, D, B, C

C. B, D, A, C

D. D, B, C, A

(2 Marks)

S3.2 Page **3** of **8** 

## **QUESTION EIGHT**

## Which of the following statements is true?

- A. A standard based on current operating conditions is known as a Basic
- B. A standard based on efficient but not perfect operating conditions is known as ideal standard
- C. A standard that is based on perfect operating conditions is known as an attainable standard
- D. A standard that is kept unaltered over a long period of time is known as a basic standard

(2 Marks)

## **QUESTION NINE**

The following summarised extract of statement of financial position is available for a company

	FRW 000
Non-current assets	31,250
Capital and reserves	47,500
Inventory	35,000
Payables	60,000
Cash	1,250
Receivables	40,000

## What is the value of quick ratio?

A. 0.71

B. 2.00

C. 0.69

D. 1.27

(2 Marks)

## **QUESTION 10**

An accounting system is one that takes raw data on transactions as its input, processes, and then produces many outputs to meet the information needs of stakeholders.

## Which one of the following is not an objective of a good accounting system?

- A. Cost Effectiveness
- B. Reliability
- C. Timeliness
- D. Material

(2 Marks)

S3.2 Page **4** of **8** 

## **SECTION B**

## **QUESTION 11**

Virunga Inn is a hotel that is located in Rubavu District. The Hotel only operates one type of single self-contained rooms. The room occupancy rate per annum is 70%. The Hotel has a total of 90 rooms. Assume the year has 365 days.

The following information relates to the Hotel for the year ended 30<sup>th</sup> June, 2025

-	FRW
Rent	90,000,000
Salaries	60,000,000
Electricity Cost	6,500,000
Maintenance Cost	5,200,000
Food	36,000,000
Beverages	12,400,000
Security	4,000,000
Other Expenses	3,200,000

The Hotel pricing strategy is to charge a profit margin of 20%.

## Required:

,	(Total 10 Marks)
iv) Calculate the rate to be charged by the Hotel Guests per room	(2 Marks)
iii) Calculate the total revenue generated by the Hotel for the year	(2 Marks)
ii) Calculate the cost per occupied room	(2 Marks)
i) Calculate the total cost incurred by the Hotel for the year	(4 Marks)

## **QUESTION 12**

a) A budget is normally defined as a quantitative plan of action prepared in advance of the period to which it relates. There are steps that are normally followed in the planning and control cycle.

## Required:

Explain the seven steps that are followed in the planning and control cycle (7 Marks)

b) Explain the following approaches as used in budgeting:

	(Total 10 Marks)
iii) Activity based budget	(1 Mark)
ii) Zero based budget	(1 Mark)
i) Incremental budget	(1 Mark)

S3.2 Page 5 of 8

## **SECTION C**

## **QUESTION 13**

a) Most products have a limited product life cycle which will show different sales and profitability patterns at different stages of the life cycle.

## Required:

## Explain the stages involved in the product life cycle

(8 Marks)

b) The monthly sales figures for a business for the first six months of the year are as follows:

Period	Sales Units
2019	408,000
2020	444,000
2021	420,000
2022	390,000
2023	414,000
2024	435,000

## Required:

Calculate the index for the year 2020,2021,2022,2023 and 2024, taking the year 2019 as the base year. (10 Marks)

c) All forecasts are subject to error, but the likely errors vary from case to case.

## Required:

Explain any two problems or limitations of forecasting.

(2 Marks)

(Total 20 Marks)

## **QUESTION 14**

a) The following information relates to Nile Ltd a business that operates in production and sale of school chairs.

Budget information for the year ended 31st December, 2024

Production / Sales units: 10,000 units

		FRW
Total Sales (FRW)		144,000,000
Materials	80,000 Kgs	48,000,000
Labour	30,000 Hrs	32,000,000
Variable Overheads	30,000 Hrs	16,800,000
Fixed Overheads		24,000,000

#### **Actual Results**

Production / Sales units 10,400 units

		FRW
Total Sales (FRW)		148,720,000
Materials	79,200 Kgs	51,480,000
Labour	32,000 Hrs	32,400,000
Variable Overheads	32,000 Hrs	17,680,000
Fixed Overheads		24,800,000

S3.2 Page **6** of **8** 

## Required:

## Calculate the following variances and interpret the variances whether favourable or adverse

i) Sales Price Variance	(2 Marks)
ii) Material price Variance	(2 Marks)
iii) Material Usage Variance	(2 Marks)
iv) Labour Rate Variance	(2 Marks)
v) Labour Efficiency Variance	(2 Marks)
vi) Fixed Overhead Volume Variance	(2 Marks)
b) Explain four factors to be considered before investigating a variance	(4 Marks)
c) Explain the difference between cost control and cost reduction	(4 Marks)
′ •	(Total 20 Marks)

## **QUESTION 15**

a) Muhanga Ltd is a company that makes three products A, B and C. The company has provided you with the following budgeted information:

	A	В	C
	FRW	FRW	FRW
Selling price per unit	55,000	65,000	72,000
Direct material cost per unit	15,600	18,000	18,000
Direct labour cost per unit	10,800	12,000	20,400
Variable overhead cost per unit	6,800	6,200	9,800
Budgeted production units	3,800	4,500	2,700

#### Additional information:

- 1. Budgeted production units are estimated to be equal to the budgeted sales units and therefore there is no closing inventory.
- 2. The cost of direct materials is FRW 2,000 per square metre.
- 3. All the three products A, B and C are made from specialized timber and as a result the timber supply is limited to 80,000 square metres per annum

## Required:

i)	Identify the limiting factor and by how much if any	(2 Marks)
ii)	Find the optimal production plan	(4 Marks)

b) Nile Ltd which is a company based in Kigali specializes in making three products Alpha, Beta and Gama. Over the years the company has been using traditional method of absorbing overhead cost using labour hours. You have been recruited as a Management Accountant of the company and your first assignment is to assist the company to transit from traditional method of absorbing overheads on the basis of labour hours to Activity Based Costing method.

The following information has been provided for the three products:

	Alpha	Beta	Gama
Production units	40,000	60,000	80,000
Labour hours per unit	5	3	2
Machine hours per unit	3	1	2
Direct labour cost per unit	160	120	90
Direct material cost per unit	240	360	110

S3.2 Page 7 of 8

### **Additional information:**

- 1) Production overheads incurred for the period was FRW 26,000,000.
- 2) The following table has also been provided for the purpose of analysis of overhead costs:

Overhead cost	Overhead	Alpha	Beta	Gama	Cost Driver
	Allocation				
Set up costs	25%	260	140	100	Number of set ups
Material handling cost	35%	320	160	120	Number of orders
Machining cost	40%	120,000	60,000	160,000	Total machine hours per annum

## Required:

Calculate the cost per unit using activity-based costing method of absorbing overheads on the basis of labour hours (8 Marks)

c) You have been provided with the following extract of summarised financial information for Nyange Ltd.

Extract of statement of profit or loss for the year ended 31st December, 2024 and 2023

	2024	2023
	FRW	FRW
Sales	590,000	400,000
Cost of Sales	300,000	160,000
Distribution and Administration Expenses	64,000	30,000
Interest Expense	100,000	90,000
Income Tax	12,000	10,000

Extract of statement of financial position as at 31st December, 2024 and 2023

	2024	2023
	FRW	FRW
Non-Current Assets	884,000	756,000
Current Assets	170,000	270,000
Equity	740,000	730,000
Non-Current Liabilities	204,000	206,000
Current Liabilities	110,000	90,000

## Required:

Calculate the following profitability ratios for each of the two years

i) Operating Profit Margin (2 Marks)

ii) Asset Turnover (2 Marks)

iii) Return on Capital Employed (2 Marks)

(Total 20 Marks)

## **End of Question Paper**

S3.2 Page **8** of **8**