CERTIFIED PUBLIC ACCOUNTANT

FOUNDATION LEVEL 2 EXAMINATIONS

F2.1: MANAGEMENT ACCOUNTING

DATE: WEDNESDAY 26, APRIL 2023

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 **should be** attempted.
3. Marks allocated to each question are shown at the end of the question.
4. Show all your workings where necessary.
5. The question paper should not be taken out of the examination room.

QUESTION ONE

M&Sons Ltd is a company located in Rwamagana district that manufactures a wine called UMUVINYO. As a new company they have not employed all required personnel to fill the remaining gaps in their finance department, therefore, the Human resource officer has given additional responsibilities of gathering information regarding production cost and sales revenues on behalf of consultant for the purpose of preparation of the complete statement.

The following budgeted and actual information were gathered by the Human resource officer for the two months ending December 2021.

Particulars	**FRW /One bottle**
Selling price	50,000
Direct materials	8,000
Direct labour	5,000
Variable production overheads	3,000

Details regarding the production and sales for the month of November and December 2021 are as follows:

Particulars	**November**	**December**
Production	500 Bottles	380 Bottles
Sales	300 Bottles	500 Bottles

Additional information

1. Fixed Production overheads are budgeted at FRW 4,000,000 per month and are absorbed on a unit basis, the normal level of production is budgeted at 400 Bottles per month.
2. Fixed selling costs was FRW 4,000,000.
3. Fixed administrative expenses were FRW 2,000,000.
4. Variable sales commission was estimated at 5% of sales revenues.
5. There is no opening inventory at the start of the month of November 2021.

Required:

Prepare operating profit statement under:

a) Absorption costing (8 Marks)

b) Marginal costing (8 Marks)

c) Explain clearly, why the profit figures calculated under absorption costing and marginal costing are different. (2 Marks)

d) Reconcile the profit obtained using both systems. (2 Marks)

(Total: 20 Marks)

QUESTION TWO

In January 2021, Rutikanga Moses established a fast-food business in Musanze City and to date, his sales level has been good but the net profit has been too low. As a result, Moses suspects that his employees may be stealing from him. While attending a recent business networking event, Moses was advised to consider employing a management accountant to enhance and improve on his business performance.

Moses has asked you for advice. He would like to understand why management accounting has become so important to achieving business success and how it differs from financial accounting. Additionally, Moses is also keen to know how employing a management accountant could improve his business performance.

During the networking event Moses heard of some new cost accounting terminologies, Moses wants you to explain these terminologies as a professional Accountant in your briefing notes.

Required:

Prepare a briefing note for Rutikanga Moses which:

a) Explain four factors that have contributed to the growth and importance of management accounting. (4 Marks)

b) Differentiate between financial accounting and management accounting. (4 Marks)

c) Describe how the employment of a management accountant could enhance and improve a business. (6 Marks)

d) Explain the following terms:

i) **Direct and Indirect costs** (2 Marks)

ii) **Variable and Fixed costs** (2 Marks)

iii) **Product and Period costs** (2 Marks)

(Total: 20 Marks)

QUESTION THREE

(a) In January 2021, Kaneza Ndego joined High Fiber Manufacturing Company, this being the high-quality optical fibers manufacturing company based in Rwamagana District as the Senior Management Accountant. He was also elected as the staff representative for the next four years. As management accountant, he has the obligation for his profession, to the public and to the organization to maintain highest standards of ethical conduct.

Required:

Advise him on his responsibility toward compliance with five standards of ethical conduct for management accountants and financial managers. (5 Marks)

(b) Gisagara SQ Ltd is an industrial lubricant which uses certain crude chemicals in two successive processes. The output of process I is transferred to process II where it is blended with other chemicals. The process costs for the month of October 2020 were as follows:

	Process I	**Process II**
Opening inventory	60,000 tones	25,000 tones
Degree of completion	40 per cent	30 per cent
Previous process costs	None	FRW 11,500
Materials cost	FRW 15,000	None
Conversion costs involved	FRW 10,625	FRW 2,750

Inputs during the period to the process	160,000 tones	
Materials cost	FRW 38,400	
Conversion costs involved	FRW 30,220	FRW 20,650
Completed and transferred quantity	175,000 tones	185,000 tones
Closing stock (WIP)	35,000 tones	10,000 tones
Completion rate	50 per cent	50 per cent

Additional information:

1. A normal loss of 5% of the materials input (during the period) to the process I is expected.
2. Any waste material from the process I can be sold for FRW 0.05 per Kg.

Required:

Demonstrate how the data above would be recorded in:

i) Process accounts for both processes for the month of October 2020. (9 Marks)
ii) Normal loss account. (2 Marks)
iii)Abnormal loss or abnormal gain account (4 Marks)

(Total: 20 Marks)

QUESTION FOUR

(a) Given below is the budget information for Rwanda cofee Ltd. and the actual results for the period to 31 December 2020.

Details	**Budget**	**Actual**
Production/Sales (units)	2,750,000	3,800,000
Direct labour hours (Hrs)	8,250,000	7,560,000
Direct materials (Kg)	5,500,000	4,320,000
Variable overheads (FRW)	85,250,000	85,000,000
Fixed overheads (FRW)	79,750,000	76,000,000

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Additional information:

1. The standard selling price of the product is FRW 300 per unit.
2. Direct labour per hour and the direct material per kg are FRW 15 and FRW 25 respectively.
3. Actual Selling price per unit and cost per unit are same as the standard. However, materials used during the period were bought at FRW 30 per unit.

Required:

Prepare budgeted profit and loss account and flexible budget for the level of output achieved for the year ended 31 December 2020? (5 Marks)

(b) You work for the accounting firm of Hakiza and Mucyo Sano as senior accountant. Recently Ms. Yuliyana, a client has been approached you for advice regarding some aspects of budgeting. Last week, Yuliyana attended a networking business event and when discussing the annual budgeting process, some of the attendees mentioned incremental budgeting and zero-based budgeting. The later attempts to improve upon Incremental type of budgeting which is perceived to carry over inefficiencies from previous periods. It allows for budget reductions and permits the re-allocation of resources from low to high priority programs. Critics are of the opinion that such approach or process of budgeting can be cumbersome in its execution. The behavioral effects of the budgeting process were also mentioned. As Yuliyana has only recently been involved with the annual budgeting process, she is unsure about what these terms mean and has asked you for information.

Required:

i) Prepare a memorandum to Ms. Yuliyana day that explains incremental budget and outline one advantage and one disadvantage of incremental Budget. (3 Marks)

ii) Describes six main purposes of budgeting. (3 Marks)

iii) Outlines any two advantages and disadvantages of the Zero-Based Budgeting. (2 Marks)

(c) You have just been appointed as full-time Management Accountant for Akeza Products Ltd; a company based in the North Province that produces cartons to meet customers' specific requirements. You have been tasked to determine the cost and invoice price per job for the forthcoming period. The following transactions relate to item RWOX9 stocked by Akeza Products Ltd for the month of December 2022:

Issues		**Receipts**		
Date	**Quantity in kg**	**Date**	**Quantity in kg**	**Unit Cost (FRW)**
6 December 2022	3,300	3 December 2022	2,500	18
16 December 2022	2,800	10 December 2022	2,700	21
23 December 2022	2,250	17 December 2022	3,100	22
26 December 2022	3,950	19 December 2022	2,800	21
28 December 2022	2,600	25 December 2022	2,750	22
31 December 2022	6,950	27 December 2022	3,200	23
		30 December 2022	3,250	24

Akeza Products Ltd had the closing balance for the month of November 2022 of 3,000 kg received at a unit price of FRW 20.

Required:

Using the FIFO method of pricing stores issues, prepare a stores perpetual inventory record for item RWOX9? (7 Marks)

(Total: 20 Marks)

QUESTION FIVE

Ruhango XL Ltd started manufacturing one single product, the Cassava Flour this year. The following figures was extracted from book of management accountant:

Production level		**50%**	**100%**
Sales and productions (kg)		400	800

		FRW	**FRW**
Sales		8,000	16,000
Production costs	Variable costs	3,200	6,400
	Fixed costs	1,600	1,600
Sales and distribution costs	Variable costs	1,600	3,200
	Fixed costs	2,400	2,400

Additional information:

1. The normal level of activity for the year is 800 kilograms. Fixed costs are incurred evenly throughout the year, and actual fixed costs are the same as budgeted.
2. There were no stocks of cassava flour at the beginning of the year.
3. In the first quarter of 2021, 220 kilograms were produced and 160 kilograms sold.
4. Ruhango XL Ltd expects to increase its production capacity during the next year.

Required:

a) **Calculate the fixed production costs absorbed by cassava flour in the first quarter of 2021 if absorption costing is used.** (3 Marks)

b) **Calculate the profit for the first quarter using absorption costing.** (6.5 Marks)

c) **Calculate the profit for the first quarter using marginal costing.** (5.5 Marks)

d) **Explain why there is a difference between the answers to (b) and (c) above and show how this difference can be reconciled.** (5 Marks)

(Total: 20 Marks)

QUESTION SIX

a) Outline the main differences between management accounting and cost accounting. (4 Marks)

b) The profit shown in the financial statements as at 31 March 2020 was FRW 11,287,000 and for the same period, the cost accounting books showed a profit of FRW 2,704,000. After checking the two sets of accounts for the source of the differences, the following issues come to your attention:

	Cost Accounts	Financial Accounting
	FRW 000	**FRW 000**
Depreciation	9,826,000	10,520,000
Stock valuations		
Opening stocks	27,510,000	25,500,000
Closing stocks	18,218,000	18,750,000
Dividends Received	-	2,635,000
Profit on sale of asset	-	850,000
Imputed Rent Charge	3,250,000	-

Required:

Prepare a statement to reconcile the two profits, starting with the profit as per the financial accounts (8 Marks)

c) Explain the meaning of the following terms:

i) Integrated accounting system. (1 Mark)

ii) Interlocking accounting system. (1 Mark)

iii)Mention any two advantages of integrated accounting? (2 Marks)

d) Twikirwa Ltd manufactures a unique high-quality umbrella and supplies twenty well-known stores in Quartier Matheus. The company currently has spare production capacity and has been approached by Ihamagarire Ltd, a local telecommunication company to supply 1,500 umbrellas for a special promotion event in September 2020. Ihamagarire Ltd has specified that it would like the umbrella to be manufactured using red waterproof fabric which is the Company color and has offered to pay FRW 5,800 per one umbrella. The management accountant computations estimated total cost per one umbrella to be FRW 5,347**.** The management accountant confirmed that based on his calculation on a financial or quantitative basis Twikirwa Limited should produce the umbrellas for Ihamagarire Ltd as it would generate additional income.

Required:

Advise the management accountant of Twikirwa Ltd the qualitative factors he should consider before finalizing the umbrella manufacturing decision. (4 Marks)

(Total: 20 Marks)

QUESTION SEVEN

(a) Two UK investors started Nyamata Processors Ltd in Bugesera District. To manufacture one unit of "Nziza", a canned food product; Nyamata Processors Ltd requires materials costing FRW 2,800 and must employ two hours of direct labour. The company's overheads are FRW 768,000 per month and all are fixed cost. The product retails at a price of FRW 7,200 per unit. Nyamata Processors Ltd has the high demand both local and international market.

During the favorable period for the farmer, the labour is very scarce. The current price of the labour is fixed at FRW 360 per hour. Today, Nyamata Processors Ltd got the urgent offer to take up a contract to manufacture a variant of "Nziza". Nyamata Processors Ltd's cost accountant has been asked to carry out an analysis to establish whether or not it would be cost effective for Nyamata Processors Ltd to undertake the contract.

The following information relate to the special offer:

1. This offer is worth FRW 648,000. The material needed would cost FRW 136,800.
2. A specialized component would have to be incorporated into the product. The specialized component could either be purchased from an outside supplier for FRW 36,000 or alternatively, it could be made by Nyamata Processors Ltd itself using material costing FRW 14,400 and an additional labour time of 12 hours.
3. It is estimated that the contract would require 20 hours of direct labour.

Required:

i) The contribution per unit for the production of "Nziza". (4 Marks)

ii) Should Nyamata Processors Ltd make or buy the specialized component. (4 Marks)

iii) Advise Nyamata Processors Ltd on whether they should accept or not the special offer to make the variant (2 Marks)

(b) Byuma Ltd is a small-scale company which manufactures three products namely; Z, T and P. The company has two departments: Assembly and Machinery which require the same level of labour expertise. The following information relates to the operations of Byuma Ltd:

1. In the period commencing 1 July 2020 and ending 30th June 2021, the company budgeted for:

Fixed overheads (FRW)	3,000,000
Capacity – Machinery (hours)	50,000
Assembly department (hours)	75,000

2. The standard costs per unit of each product in FRW are:

	X	**T**	**P**
Selling price	**2,480**	**1,900**	**2,800**
Variable costs:	700	400	800
Direct material	480	320	560
Direct labour – Machinery department (FRW 80 per hour)	480	320	560
– Assembly department (FRW 60 per hour)	360	390	420
Total variable costs	**2,020**	**1,430**	**2,340**

3. Information in respect to the maximum demand for each product which Byuma Ltd. could alternatively source from an independent supplier, for the same quality, is given below:

Product	**Maximum demand (units)**	**Price quoted by external supplier per unit (FRW)**
X	3,000	1,750
T	2,500	1,400
P	5,000	2,500

Required:

i) **Identify and compute the limiting factor for Byuma Ltd.** (4 Marks)

ii) **Determine and advise Byuma Ltd. On which product(s) should be sourced from the external supplier and the relevant quantities.** (4 Marks)

iii) Based on your recommendations provided in (ii) above**, determine the profits for the period commencing 1 July 2020 and ending 30th June 2021.** (2 Marks)

Total: 20 Marks)

End of question Paper

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