



**CERTIFIED PUBLIC ACCOUNTANT
FOUNDATION LEVEL 2 EXAMINATIONS**

F 2.1: MANAGEMENT ACCOUNTING

DATE: FRIDAY, 27 AUGUST 2021

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.

QUESTION ONE

- a) **Define management accounting and discuss its nature and scope.** (5 Marks)
- b) The Telecom Factory Company deals in production of ream papers, and it is currently operating at 40% capacity producing 10,000 units of ream papers per year. The data provided below relates to the cost of production of one ream of paper:
- Material Frw 10,000
 - Labour Frw 3,000
 - Overheads Frw 5,000 (60% fixed)

The selling price is Frw 20,000 per ream. If the production capacity of the factory is increased to 50%, the selling price will drop by 3%. At 90% capacity, both selling price and direct material will decrease by 5%.

Required:

Prepare a flexible budget showing the profits/ losses at 40%, 50% and 90% capacity utilisation. (10Marks)

- c) **Discuss the role of budgeting in a manufacturing company.** (5 Marks)
- (Total: 20 Marks)**

QUESTION TWO

- a) Price Global Company Limited has two Services Departments and two Production Departments. The Services Departments support the Production Departments in their daily operations.

The following cost information relates to the 3 months' period ended 31 March 2021:

Details	Total	Services Department		Production Department	
		Frw		Frw	
	Frw	A	B	M	N
Indirect wages	65,000	30,000	10,000	15,000	10,000
Consumables	100,000	30,000	10,000	10,000	50,000
Power	50,000				
Rent and rates	30,000				
Depreciation	10,000				

Additional information

- i) The below data relates to consumption of power, value of machinery, space occupied by each department and the direct labour hours:

Details	Total	Services department		Production department	
		A	B	M	N
Power consumption (units)	50	5	15	10	20
Value of machinery Frw)	500,000	50,000	150,000	50,000	250,000
Floor area (m2)	50,000	10,000	12,000	8,000	20,000
Direct labour hours	30,000	-	-	20,000	10,000

- ii) The Services Department overheads are charged as follows:

Department	A	B	M	N
A	0%	20%	30%	50%
B	10%	0%	60%	30%

Required:

- (i) Carry out a secondary overhead apportionment using repeated distribution method (10Marks)
- (ii) Differentiate standard costing from standard cost. (2Marks)
- (iii) Describe the procedures for standard cost setting. (4Marks)
- (iv) Explain at least 4 types of standard costing. (4Marks)
- (Total: 20 Marks)**

QUESTION THREE

- a) Muhanga Jobbing Rwanda Limited is a manufacturing company incorporated in the Republic of Rwanda. On 1 December 2020, the company had one uncompleted job in its factory. The following information relates to the job card No 4500 for uncompleted work:

S/N	Particulars	Amount” Frw”
1	Direct materials	630,000
2	Direct labour (120 hours)	350,000
3	Factory overhead	240,000
	Total	1,220,000

During the month, three new jobs were started in the factory and the cost of production were as follows:

Direct materials issued to:	“Frw”
Job N4500	2,390,000
Job N4501	1,680,000
Job N4502	3,950,000
Job N4503	4,420,000
Damaged stock written off during the month	2,300,000
Materials transfers between jobs were as follows:	“Frw”
Job N4502 to Job N4501	250,000
Job N4500 to Job N4502	620,000
Materials returned to store:	“Frw”
Job N4500	870,000
Job N4503	170,000
Direct labour hours recorded	
Job N4500	430 hours
Job N4501	650 hours
Job N4502	280 hours
Job N4503	410 hours

The cost of labour hours during the period was Frw 3,000 per hour and production overhead is absorbed at the rate of Frw 2,000 per direct hour. Production overhead incurred during the period amounted to Frw 3,800,000. Completed jobs were delivered to customers and invoiced Frw 5,500,000 for N4500; Frw 8,000,000 for N4502; and Frw 7,500,000 for N4503.

During the period, administration and marketing overheads amounted to Frw 3,200,000 and they are added to the cost of sales at the rate of 20% of factory cost.

Required:

- i) Prepare the job accounts for each job during the month ended 31 December 2020. (6 Marks)
- ii) Prepare the profit/ loss statement on each completed job. (4 Marks)
- iii) Determine the factory cost for the uncompleted job. (2 Marks)

- b) Imena Milk Industries Limited deals in production of milk. Over the past two years, it realised its sales were unstable, something that triggered the management to put more efforts in advertising its products on different media platforms whilst expecting increase in sales.

Below are the cost of advertisement and associated sales unit for the past six months:

Month	Advertisement cost (Frw)	Sales units
January	800,000	4000
February	500,000	3000
March	350,000	1000
April	1,000,000	6000
May	850,000	5000
June	1,300,000	7000
July	1,100,000	6000
August	1,600,000	8000

- i) Using the High Low method, estimate the total cost function and calculate unit variable cost and unit fixed cost. (4 Marks)
- ii) Estimate the total cost function using linear regression analysis and calculate how much cost will be incurred when sales units are 1000. (4 Marks)

(Total: 20 Marks)

QUESTION FOUR

- a) Umurava Company Limited manufactures three products namely X, Y,Z and you are provided with the following information:

Sales forecasts

Product	Quantity	Price per unit
X	4,000	300
Y	1,000	120
Z	3,500	340

Materials used in the production of the above products are Material A costing Frw 7 per unit, Material B costing Frw 6, and Material C costing Frw 4

Units of quantities used in each product are given below:

Product	A	B	C
X	4	2	4
Y	3	3	2
Z	2	1	1

Below information regarding stocks have been also provided to you:

Finished stocks

Product	X	Y	Z
Opening inventory units	1,000	2,000	500
Closing inventory units	1,500	1,650	400

Material stocks

Material	A	B	C
Opening inventory units	16,000	10,000	12,000
Closing inventory units	32,000	20,000	10,000

Required

Determine the:

- i) Sales budget in quantity and value. (3Marks)
- ii) Production budget in units. (5Marks)
- iii) Material utilisation budget. (3Marks)
- iv) Purchase budget in quantity and value. (5Marks)

b) Rubavu Hills Limited manufactures a single product G with a single score of labour. The sales budget and finished goods budget for the year ended 31 December 2020 are as follows:

Sales units: 1,500 units at a selling price of Frw 600 per unit

Opening stock- finished units 300 units

Closing stock – finished units 190 units

The standard direct labour hours for the product G is 3 hours. The budgeted productivity ratio for director labour is 75% only.

The company employs 40 direct workers who are expected to work an average of 120 hours each in the period under consideration.,

Required:

- i) **Prepared a Direct labour budget** (4 Marks)
(Total: 20 Marks)

QUESTION FIVE

- a) (i) **With aid of typical examples, differentiate production overheads from administrative overheads.** (3Marks)
(ii) **Explain 4 types of functional costs that a manufacturing company is likely to incur as it carries out its daily operations.** (2Marks)
- b) A company manufactures a single product M in two consecutive processes A and B. At the beginning of the quarter ended 31 December 2020 there was work in progress valued at Frw 24,000; Frw 14,000 and Frw 4,000 for material, labour, and overheads respectively.

During the quarter, the following units and costs were added:

- Material: Frw 60,000 (2000 units)
- Labour: Frw 33,500
- Overheads: Frw 15,000

The normal loss is estimated to be nil

As of 31 December 2020, there were 460 incomplete units at the following degrees of completion:

- Material: 100%
- Direct labour: 65%
- Overheads: 55%

The company uses weighted average cost method in its valuation of inventory

Required:

- i) **Statement of equivalent production units.** (4 Marks)
ii) **Statement of cost.** (5 Marks)
iii) **Statement of evaluation.** (3 Marks)
iv) **Process account.** (3 Marks)

(Total :20 Marks)

QUESTION SIX

- a) Majyambere Hardware Company Limited (MHC Ltd) has been operating in Muhanga district for the last 3 years. The owner of the company Mr Majyambere has recently asked his accountant who is your former classmate, as to when the company will start making profits. However, since the accountant was not able to respond to his boss's question, he has approached you as a friend to help him answer the question.

Below are data relating to the company's operations in 2020 provided to you for reference purposes:

Sales:

Particulars	Amount (Frw)
Sales	15,000,000
Direct material	3,250,000
Direct labour	2,700,000
Variable overhead cost	3,500,000
Administration expenses	1,050,000
Total	25,500,000

Additional information:

- 1) Selling and distribution cost is Frw 2.3 million, Frw 1 million of which being variable costs
- 2) The following changes are expected to occur during the year:
 - Variable selling and distribution expenses will reduce by 5% due to efficiency in sales staff
 - Variable overhead will reduce by 3%
 - Material cost will increase by 2% due to increase in inflation rate in the country
 - Labour cost will increase by 4%
 - The selling price will be reduced by 3% to attract many customers
 - The closing stock will be nil at the end of the period.

Required:

- i. Calculate the breakeven point in sales using the above provided data. (6 Marks)
 - ii. Determine the margin of safety in sales value for the year. (2 Marks)
 - iii. Considering the amount of investment and its cost, Majyambere would like to make a profit of Frw 2.25 million. Advise how much sales to make in order to get this profit (2 Marks)
 - iv. Prepare a summary of operating statement to show the net profit. (2 Marks)
 - v. Discuss limitations of CVP analysis. (5 Marks)
- b) Vision Company requires 1000 units of a component in a manufacturing process in the upcoming year which costs Frw 50 each. The items are available locally and the lead time is 7 days. Each order costs Frw to prepare and process while holding cost is Frw 15 per unit per year for storage opportunity cost of capital
- (i) **Required: How many units should be ordered each time an order is placed to minimise inventory costs?** (2Marks)
 - (ii) **Calculate the re-order level.** (1 Mark)
- (Total :20 Marks)**

QUESTION SEVEN

- a) **Compare and contrast management accounting and financial accounting.** (8 Marks)
- b) Umucyo Company Limited produces soft drink products including juice, milk, and water. Over the past years the company has been applying full costing, absorbing production overheads on the basis of direct labour hours. The management of the company wishes to adopt Activity-Based Costing (ABC) as they are convinced that it will give them appropriate cost values

The following cost per unit information has been obtained for the month of May 2020:

Particulars	Juice	Milk	Water
Direct material (Frw)	1,500	1,450	550
Direct labour (Frw 250 per hour)	400	150	450

Production for the months were 5000 units; 10,000 units; and 2000 units for Juice, milk and water respectively. Production overhead is Frw 14,480,000 which is analysed as follows:

Machine running costs	Frw 4,400,000
Machine set up costs	Frw 4,240,000
Ordering costs	Frw 3,600,000
Material handling costs	Frw 2,240,000.

Additional information in respect of cost drivers are indicated below:

	Juice	Milk	Water
Total material movement	10	15	5
Order size	500	1,000	600
Per unit production runs	2	2	2
Number of set ups	3	5	2

Required:

- (i) **Determine the unit selling price of each product using ABC technique assuming the company targets a profit of 20% on cost.** (9 Marks)
- (ii) **Discuss the steps of ABC system.** (3Marks)
- (Total: 20 Marks)**

End of question paper