



## **CERTIFIED ACCOUNTING TECHNICIAN**

# LEVEL 2 EXAMINATIONS

# **L2.3: MANAGEMENT ACCOUNTING**

**TUESDAY: 2 DECEMBER 2014** 

## **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**

Kundabantu John Claude is the Managing Director of a company known as *No Hurry in Africa* with 3 sales divisions at Bugesera, Goma and Rusumo. The company makes and sells two products –A and B. Budgeted sales for the year to 31 December 2014 at each place are given below:

CPAR iCPAR iCPAR iCPA	Product A 50,000 units @ Frw 800
Bugesera:	Product B 35,000 units @ Frw 500
Goma:	Product B 50,000 units @ Frw 500
Rusumo:	Product A 75,000 units @ Frw 800

Actual sales during the same period were:

CPAR ICPAR ICPAR ICPAR	Product A 62,500 units @ Frw 800
Bugesera	Product B 37,500 units @ Frw 500
Goma	Product B 62,500 units @ Frw 500
Rusumo	Product A 77,500 units @ Frw 800

From reports of his sales people, Kundabantu estimated that the sales budget for the year ending 31 December 2015 will be higher than 2014 budget in the following aspects:

Bugesera	Product A: 4,000 units
	Product B: 2,500 units
Goma	Product B: 6,500 units
Rusumo	Product A: 5,000 units

Intensive sales campaign in Goma and Rusumo is likely to result in additional sales of 12,500 units of product (A) in Goma and 9,000 units of Product (B) in Rusumo.

#### Required:

- a) Prepare a sales budget for Kundabantu John Claude for his three business sites and two products for the year ended 31 December 2015. (12 Marks)
- b) The stock levels on January 1 2014 for the two products were respectively 20,000 and 32,000 units. If desired closing stock is 25,000 and 36,000 respectively, prepare the production budget for the company.

(8 Marks)

(Total 20 Marks)

#### **QUESTION TWO**

Murakoze Ltd. is a manufacturing company which produces and sells a single product "Dawa Moto".

Cost	Frw.
Variable manufacturing	45
Fixed manufacturing	35
Variable selling and administration	8
Fixed selling and administration	<u>30</u>
iCPAR	118

Fixed manufacturing costs per unit are based on a predetermined rate established at a normal activity level of 18,000 production units per period. Fixed selling and administration costs are absorbed into the cost of sales

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at 20% of the selling price. Under/over recovery of overheads are transferred to the profit and loss account at the end of each period.

The following information has been provided for two consecutive periods:

CICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR RICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR	Period 1	Period 2
Sales: (units)	17,000	18,000
Value	Frw 2,550,000	Frw 2,700,000
Variable manufacturing costs	Frw 720,000	Frw 828,000
Variable selling and administration costs	Frw 136,000	Frw 144,000
Fixed manufacturing costs	Frw 640,000	Frw 630,000
Fixed selling and administration costs	Frw 540,000	Frw 540,000
Production (units)	16,000	18,400

#### Required:

- a) Income statements for each of the periods under the full costing method. (5 Marks)
- b) Income statements for each of the periods under the direct costing method. (5 Marks)
- c) Reconciliation for each period of the profit/loss obtained under the two methods in (a) and (b) above

(4 Marks)

- d) Outline three arguments in support of
- i) The full costing method (3 Marks)
- ii) The direct costing method (3 Marks)

(Total 20 Marks)

### **QUESTION THREE**

(a) A hospital's records show that the cost of carrying out health checks in the last five accounting periods have been as follows:

AR ICE AR ICE AR ICE	Number of patients seen	Total cost (Frw)
AR iCP	10PAR 10PAR 10PAR 10PAR 10PAR 650	1,712,500
2	1CPAR ICPAR ICPAR ICPAR ICPAR 940	1,780,000
3	1,260	1,865,000
4	990	1,798,000
5	1,150	1,836,000

Using the high-low method and ignoring inflation calculate the estimated cost of carrying out health checks on 850 patients in period 6. (10 Marks)

(b) Ukweli Limited supplies plastic crockery to fast food restaurants in a metropolitan city. One of its products is a special cup for serving fruit juice which is disposable.

Additional information in relation to the special cup includes:

- 1) Cups are sold in packs of 10 pieces at a price of Frw 5,000 per pack.
- 2) The annual demand for the plastic cup has been forecasted at 40,000 packs.
- 3) Ukweli Limited purchases the cups direct from the manufacturers at Frw 4,000 per pack with three days lead time.
- 4) The ordering and related cost are Frw. 800 per order

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5) The carrying cost is 10% of the cost per week

#### Required:

(i) Economic order quantity (EOQ) (4 Marks)

(ii) Number of orders needed per year (2 Marks)

(iii) The total cost associated with Economic order quantity (4 Marks)

(Total 20 Marks)

#### **QUESTION FOUR**

The following information has been obtained from the latest monthly accounts for an output level of 10,000 units for a cost centre.

ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR I	Frw
Direct Labour	140,000
Direct Material Cost	100,000
Indirect Labour	30,000
Depreciation	15,000
Repair And Maintenance	10,000
Total	295,000

Assume that it's possible to classify the above expenditure items as follows:

Item of expenditure	Variable cost/ unit (Frw)	Total fixed cost (Frw)	
Direct Labour	IC AR ICPAR IC 14 ICPAR ICP	All iCPAR iCPAR iCPAI	
Direct Material Cost	10	All iCPAR iCPAR iCPAI	
Indirect Labour	iCFAR iCPAR iCPAR iCPAR iCP	30,000	
Depreciation	iCHAR iCPAR iCPAR iCPAR iCP	15,000	
Repair and Maintenance	IC IR ICPAR I 0.5 CPAR ICP	5,000	

### Required:

a) Establish the individual cost functions for each of the above cost elements (10 Marks)

b) Establish the cost estimating equation using accounts analysis method (3 Marks)

c) Using the equation in (b) above estimate the total cost that would be incurred on 13,500 units

(3 Marks)

d) Enumerate the advantages and disadvantages of account analysis method (4 Marks)

(Total 20 Marks)

#### **QUESTION FIVE**

a) Ancestors Company has two departments, A and B, engaged in manufacturing operations and they are serviced by stores, maintenance department and a tool room. The following has been budgeted for the next financial period:

iCPAR iCPAR iCPAR iCPAR iCPA iCPAR iCPAR iCPAR iCPAR iCPA	Total overhead	A	В	Stores	Maintenance	Tool Room
iCPAR iCPAR iCPAR iCPAR iCPA iCPAR iCPAR iCPAR iCPAR iCPA	Frw "000"	Frw	Frw "000"	Frw "000"	Frw "000"	Frw "000"
iCPAR iCPAR iCPAR iCPAR iCPA iCPAR iCPAR iCPAR iCPAR iCPAR iCPAR		"000"				
Indirect Labour	1,837	620	846	149	115 AR ICPAR ICPAR	107
Supervision	CICPAR ICPAR ICPA 140	iCPAR iCPAR iC	PAR iCPAR iCP	AR iCPAR iCPAR i	CPAR iCPAR iCPAR iCPAR	CPAR iCPAR iCPAR
Power	160	iCPAR iCPAR iC	PAR iCPAR iCP	AR iCPAR iCPAR i	CPAR iCPAR iCPAR iCPAR	CPAR ICPAR ICPAR
Rent	280	iCPAR iCPAR iC	PAR ICPAR ICP	R iCPAR iCPAR i	C PAR ICPAR ICPAR ICPAR	CPAR ICPAR ICPAR
Rates	112	icpar icpar ic	PAR ICPAR ICP. PAR ICPAR ICP.	AR ICPAR ICPAR I AR ICPAR ICPAR I	CPAR ICPAR ICPAR ICPAR CPAR ICPAR ICPAR ICPAR	CPAR ICPAR ICPAR
Plant Insurance	40	icpar icpar ic icpar icpar ic	PAR ICPAR ICP PAR ICPAR ICP	AR ICPAR ICPAR I AR ICPAR ICPAR I	C'AR ICPAR ICPAR ICPAR C'AR ICPAR ICPAR ICPAR	CPAR ICPAR ICPAR : CPAR ICPAR ICPAR :
Plant Depreciation	20	iCPAR iCPAR iC iCPAR iCPAR iC	PAR ICPAR ICP PAR ICPAR ICP	AR ICPAR ICPAR I AR ICPAR ICPAR I	C'AR ICPAR ICPAR ICPAR C'AR ICPAR ICPAR ICPAR	CPAR ICPAR ICPAR : CPAR ICPAR ICPAR :
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#### Additional information:

R ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR	A	В	Stores	Maintenance	Tool Room
Floor area (square meters)	1,000	2,500	1,100	600	400
Number of employees	30	50	10	ICPAR ICPAR ICPA 20	RICPARICPARI30
Power (000kilowatt hours)	60	30	3	ICPAR ICPAR ICPAR 15	RICPARICPARI 12
Number of material requisitions	5,000	6,000	R ICPAR ICPAR R ICPAR ICP <del>a</del> r	2,000	3,000
Maintenance hours	8,000	9,000	R ICPAR ICPAR R ICPAR ICP <del>a</del> r	ICPAR ICPAR ICPAR ICPA ICPAR ICPAR ICPAR ICPA	6,000
Plant valuation (Frw "000")	50	40	R ICPAR ICPAR R ICPAR ICP <del>a</del> r	5	5
Tool room hours(000) estimated	7	10	R iCPAR iCPAF R iCPAR iCP <del>A</del> F	ICPAR ICPAR ICPAR ICPA ICPAR ICPAR ICPAR ICPA	R ICPAR ICPAR ICPAR R ICPAR ICPAR ICPAR
Machine hours(000) estimated	55.2	99	R iCPAR iCPAF R iCPAR iCP <del>A</del> F	ICPAR ICPAR ICPAR ICPA ICPAR ICPAR ICPAR ICPA	R iCPAR iCPAR iCPAF R iCPAR iCPAR iCPAF

#### Required:

a) Apportionment of the overhead costs to the various cost centers

(14 Marks)

b) Highlight the benefits and criticisms of ABC system

(6 Marks) (Total 20 Marks)

#### **OUESTION SIX**

a) Cost and management accounting is widely used in manufacturing and service entities to determine the cost incurred in producing a product and availing a service to the market.

### Required.

- i) In context of the above statement list five factors that management should consider before setting a cost accounting system. (5 Marks)
- ii) Explain five problems that may be encountered by an organization when installing a new cost accounting system. (5 Marks)
- b) Uhindi Limited is a manufacturing organization dealing with manufacture of animal feeds. Of late it has been experiencing problems of very high labour turnover. The management is contemplating changing their salary and wage policy.

#### Required

i) List four types of incentive schemes

(4 Marks)

ii) List six methods that can be adopted by the management of Uhindi Limited to reduce the labour turn over (6 Marks)

(Total 20 Marks)

#### **QUESTION SEVEN**

a) SB Ltd. manufactures a single product branded "BXL". One of the components required to manufacture product "BXL" is "RD"

The following data relates to component "RD"

Annual demand	12,500 units
Cost of placing an order	Frw 150 per order
Cost per unit	Frw 300
Carrying cost per unit per annum	Frw 60

SB Ltd. has been offered a quantity discount of 5% on the purchase of "RD" provided the order size is 6,250 units per order.

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## Required:

Advise the management of SB Ltd whether the quantity discount offer should be accepted compared to other available options (8 Marks)

b) Var Ltd. manufactures a product branded "QM". The standard cost per unit of "QM" is given below:

	R. CPAR iCPAR iCPAR iCPAR iCPAR iCPAR iCPAR iCPAR iCPAR iCPAR	Frw
Materials	0.5 Kilogram's at Frw. 13 per Kilogram	6.50
Labour	0.30 hours at Frw 15 per hour	4.50
Fixed overheads	R CPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR	3.00
PAR ICPAR ICPAR ICPAR ICPAR PAR ICPAR ICPAR ICPAR ICPA	R. CPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR	14.00

#### Additional information:

- 1. For the month of April 2014, the budgeted production of product "QM" was 24,000 units
- 2. Fixed overheads are absorbed on labour hour basis
- 3. The actual results for the month of April 2014 were as follows:

Units produced	27,000
Materials used (kilogram's)	12,800
Cost of materials (Frw)	172,000
Labour hours worked	8,400
Cost of labour (Frw)	128,000
Overheads expenditure (Frw)	75,000

## Required:

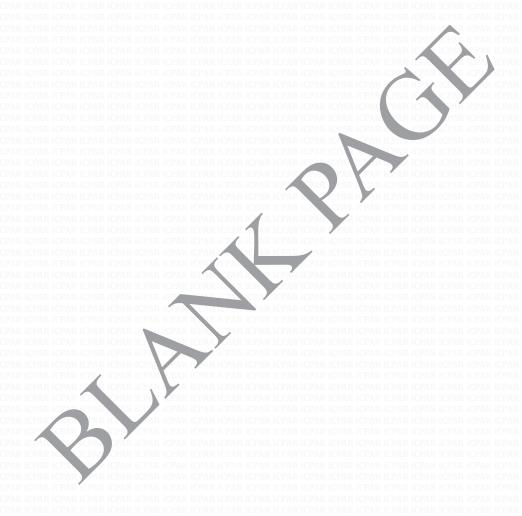
i) Materials price variance	(2 Marks)
ii) Materials usage variance	(2 Marks)
iii) Labour rate variance	(2 Marks)
iv) Labour efficiency variance	(2 Marks)
v) Fixed overheads expenditure variance	(2 Marks)
vi) Fixed overheads volume variance	(2 Marks)
	(Total 20 Marks)

# **End of question paper**

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