INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS OF RWANDA

Driving Sustainable Performance

Associate of IFAC

CERTIFIED ACCOUNTING TECHNICIAN

LEVEL 2 EXAMINATIONS

L2.3: MANAGEMENT ACCOUNTING

TUESDAY: 1 DECEMBER 2015

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) ABC Ltd manufactures product X. Product X passes through two processes before its ready for sale. The output of process 1 is passed to process 2 where it's blended with other ingredients. The process costs are as follows;

	Process 1	**Process 2**
Direct materials	4500 units @Frw 160	3800 units @ Frw 180
Direct labour	Frw 360,000	Frw 280,000
Expected output	75%	90%
Scrap value	Frw 120 per unit	Frw 160 per unit
Actual output (units)	3200	6500

REQUIRED:

Prepare cost accounts for :

(i) Process 1 **(3 Marks)**

(ii) Process 2 **(3 Marks)**

(iii) Normal loss **(3 Marks)**

(iv) Abnormal gain **(3 Marks)**

(v) Abnormal loss **(3 Marks)**

(b) Explain the role of costing in a non manufacturing sector. **(5 Marks)**

(Total 20 Marks)

QUESTION TWO

KS Ltd is a manufacturing company that produces two products Phillips and Alps. The following information has been provided:

	Phillips		Alps	
		Frw		Frw
Unit selling price		20,200		18,300
Standard costs				
Direct labour	8hrs at Frw1000@	8,000	7hrs at Frw 1000@	7,000
Direct material	12 units at Frw 500@	6,000	11units at500@	5,500
Variable overheads	4 machine hours at Frw 500@	2,000	5 machine hours at Frw 500@	2,500
Budgeted production (units)	10,000		12,000	

The General Manager has confirmed that in the next period, labour will be limited to 130,000 hours while the other outputs will be unlimited. There will be no opening or closing inventory during the period.

REQUIRED:

(a) Calculate the number of units of Phillips and Alps that should be produced to maximize profits.

(12 Marks)

(b) Define and give an example of each of the following:

(i) Sunk cost **(2 Marks)**

(ii) Opportunity cost **(2 Marks)**

(iii) Avoidable costs **(2 Marks)**

(iv) Unavoidable costs **(2 Marks)**

(Total 20 Marks)

QUESTION THREE

(a) Distinguish between zero-based budgeting and incremental budgeting. **(2 Marks)**

(b) Explain any four reasons for preparing budgets in an organization. **(6 Marks)**

(c) The following information was extracted from the sales and purchases ledger for KAB limited for the year ended 30 June 2015

	Sales (Frw)	Purchases (Frw)
December	15,000	10,500
January	10,000	12,000
February	17,500	13,000
March	8,000	15,000
April	18,000	12,000
May	20,000	13,500
June	28,000	14,000

Additional information:

(i) Closing cash balance as at 31 December 2014 was Frw 50,000

(ii) It is the company policy to receive a 50% cash payment on sales and the remaining 50% to be received in the following month.

(iii) 65% of the purchases are paid in the month of purchase while the balance is paid in the following month.

(iv) Wages and rent of Frw 3,000 and Frw 9,000 respectively are paid out monthly.

REQUIRED:

Prepare a cash budget for KAB Ltd for the months of January to June 2015. **(12 Marks)**

(Total 20 Marks)

QUESTION FOUR

Vex Ltd manufactures a single product, mainly for the domestic market. The following information on the standard prices, actual prices and costs for the year ended 31 October, 2015 has been provided;

Standard

Unit selling price (Frw)	30,000
Fixed over heads (Frw)	5,000
Budgeted production and sales (units)	10,000

Actual

Unit selling price (Frw)	32,000
Fixed over heads (Frw)	5,500
Actual production and sales (units)	12,000

Costs

	Standard	**Actual**
Direct labour	3 hrs @ at Frw 4000	2.5hrs @at Frw 4,500
Direct material	3 kg @ at Frw 2,000	3.5kg @at Frw 1,800

There was no opening and closing inventory during the period.

REQUIRED:

(i) Sales price variance **(5 Marks)**

(ii) Material price variance **(5 Marks)**

(iii) Labour rate variance **(5 Marks)**

(iv) Material usage variance **(5 Marks)**

(Total 20 Marks)

QUESTION FIVE

(a) Ham Ltd is an agro based firm that deals in maize milling. It uses a special machine that is managed by 10 workers. Due to the big number of maize growers the machine is subject to constant servicing to avoid total breakdown.

Information on the maintenance costs and actual machine hours for the period 1 January 2015 to 30 June 2015 is given below:

Period (months)	Machine hours	Maintenance costs (Frw '000')
January	800	350
February	1000	200
March	400	150
April	1300	450
May	1200	200
June	1600	500

REQUIRED:

(i) Determine the cost function and calculate the total fixed costs **(5 Marks)**

(ii) Ham limited will require 1,800 machine hours for the month of July 2015 to meet the projected demand. Calculate the total maintenance cost for the month of July 2015. **(2 Marks)**

(iii) Outline the steps involved in estimation of the cost function. **(5 Marks)**

(b) Explain **any four** roles of the management accountant in an organization **(8 Marks)**

(Total 20 Marks)

QUESTION SIX

(a) Remox Ltd deals in the production of soya powder which is sold to the community primary schools in Nyamirambo. The budgeted production information for 2015 is as follows:

Budgeted costs	Frw '000'
Direct materials	28,000
Direct labor	42,000
Variable overheads	36,400
Fixed over heads	48,000

Remox Ltd has a budgeted output of 2,800 batches but orders of 2,400 batches have been received from all the community schools at a price of Frw 100,000 per batch.

A new order has been received from an urban school for the remaining batches at a price of Frw 60,000 per batch. Direct labour costs will remain fixed throughout the period.

REQUIRED:

(i) Advice the firm on whether to reject or accept the order from the new customer **(5 Marks)**

(ii) Basing on the advice in (i) above calculate the firms profit or loss for the period. **(7 Marks)**

(b) Dax Ltd deals in art and craft products. In the weaving of crafts bags, a special fiber is required. The gallery has been making the special fiber while incurring the following costs.

Cost	Frw
Direct labour	500
Direct materials	700
Variable overheads	450
Fixed overheads	8,000

Making the special fiber requires 3 labour hours. Labour hours are scarce and are currently being used to make craft hats which yield a contribution of Frw 100 per labour hour. Dax Ltd has got an offer to purchase the special fiber at Frw 1500 from another gallery.

REQUIRED:

(i) Advise the company on whether to make or buy the special fiber. **(5 Marks)**

(ii) State any three qualitative factors that should be considered before purchasing from an outside supplier. **(3 Marks)**

(Total 20 Marks)

QUESTION SEVEN

(a) Mr. Mushinda assigned 50 workers to accomplish a given piece of work. All workers worked independently and tasks were assigned proportionately. Total payment agreed was Frw 2.5 Million and all the work was to be accomplished within 10 days. In order to motivate them, he offered the following bonus rates basing on completion time

Completion time	Bonus %
1-5 days	50
6-7days	30
8-9days	20
10 days	10
Above 10 days	0

Completion time was recorded as follows:

Percentage of workers	Completion time (days)
30	1-5
26	6-7
16	8-9
16	10
12	12

REQUIRED:

(i) Calculate total bonus payment made to all workers by Mr. Mushinda . **(7 Marks)**

(ii) Calculate the total wage expense incurred. **(2 Marks)**

(iii) Explain any three incentive schemes that can be adopted by management to improve the productivity of workers. **(3 Marks)**

(b) With illustrations explain:

(i) Economist model of cost volume profit analysis. **(4 Marks)**

(ii) Accountants cost volume profit model. **(4 Marks)**

(Total 20 Marks)

End of question paper

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