CERTIFIED PUBLIC ACCOUNTANT

LEVEL 2 EXAMINATIONS

F2.1: MANAGEMENT ACCOUNTING

MONDAY: 10 JUNE 2013

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) Costs may be classified according to relevance in decision making. Distinguish the following costs in reference to the above;

i) Relevant and irrelevant costs **(4marks)**

ii) Avoidable and unavoidable costs **(4marks)**

iii) Sunk and opportunity costs **(4marks)**

(b) Explain the following costing terms as used in management accounting:

i) Cost **(2marks)**

ii) Cost unit **(2marks)**

iii) Cost Centre **(2marks)**

iv) Cost Tracing **(2marks)**

(Total 20 marks)

QUESTION TWO

Fan Base (FB) ltd operates a megastore featuring sports merchandise. It uses an economic order quantity decision model to make inventory decisions. It is now considering inventory decisions for its APL soccer jerseys product line, a highly popular item. Data for 2013 are:

Expected annual demand for jerseys	10,000 units
Ordering cost per purchase order	Frw200
Carrying cost per year	Frw 7 per jersey

Each jersey costs FB Frw 40 and sells for Frw 80. The Frw 7 carrying cost per jersey per year comprises the required return on investment of Frw 4.80 (12% x Frw 40 purchase price) plus Frw 2.20 in relevant insurance, handling, and theft-related costs. The purchasing lead time is 7 days. FB is open 365 days a year.

Required:

(i) Calculate the Economic Order Quantity **(5marks)**

(ii) Calculate the number of orders that will be placed each year. **(2marks)**

(iii) Calculate the reorder point. **(4marks)**

(iv) Calculate the total cost associated with the policy **(4marks)**

(v) Highlight the assumptions of the economic order quantity model. **(5marks)**

(Total 20 marks)

QUESTION THREE

Hammer ltd manufactures a product whose standard variable cost is given below

	Frw
Direct materials (2kg @ Frw 3)	6
Direct labour (0.75 hours @ Frw 4)	3
Variable overheads	1

The company treats fixed overheads as period costs and therefore they are not charged to products. The following information relates to the month of March 2013

	1/3/2013	31/3/2013
	Frw	Frw
Stocks (all at standard cost)		
Raw materials	12,000	6,000
Finished goods	36,000	42,500

The following information is available for the month of March 2013 Sales @ Frw 20 per unit 200,000

Material purchases @ Frw 3.50 per kg	42,000
Direct labour cost (8000 hours)	30,000
Variable overheads	12,000
Material price variance (adverse)	21,000

The management is wondering whether they could have performed better.

Required

Calculate the following variances in each case stating two possible causes

a) Materials usage variance **(6 marks)**

b) Labour rate variance **(4 marks)**

c) Labour efficiency variance **(4 marks)**

d) Variable overhead expenditure variance **(3 marks)**

e) Variable overhead expenditure variance **(3 marks)**

(Total 20 marks)

QUESTION FOUR

a) Reward ltd uses job order costing method. The following information relate to Job SN202.

Direct materials	Frw 62,000
Direct labour (40hrs @ Frw 2000/hr)	Frw 80,000

The company uses direct labour hours to absorb overhead. Budgeted overheads for the year 2013 are Frw 300,000 and the budgeted direct labour hours are 15,000 hours.

Required

i) Production cost for the Job **(5marks)**

ii) Total price of the job if the company's profit mark up is 25% **(5marks)**

b) Engen ltd operates a transport business between Rwanda and Kenya. It has recently acquired a new bus to cater for its expanding business.

The following information relates to the initial and maintenance cost of the bus.

	Frw'000'
Cost	10,000
Scrap value	2,000
Insurance per annum	400
Annual road licence fee	12
Replacement of tyres (every 25,000 kilometres)	50
Maintenance costs (every 10,000 kilometres)	20

Additional information

1. The bus has an economic life of 5 years.
2. The bus has 6 tyres each costing **Frw** 8,000.
3. On average the bus covers 20,000 km per litre of fuel. Fuel costs Frw 100 per litre.
4. The bus is expected to cover 10,000kilometres in the month of August 2013.

Required:

Determine for the month of August 2013:

i) Variable costs per Kilometre **(4marks)**

ii) Fixed costs per Kilometre **(4marks)**

iii) Total cost of running the bus per Kilometre **(2marks)**

(Total 20 marks)

QUESTION FIVE

Meka ltd manufactures a single product branded **"K".** The standard cost per unit of the product is given below;

	Frw
Direct materials	700
Direct labour	350
Variable production overheads	150
Fixed production overheads	400

Additional information:

1. Production and sales for the month of July and August 2013 are as follows July 2013 Aug 2013

	Units	Units
Production	2000	3200
Sales	1750	2750

2. The selling price per unit of **"K"** is **Frw** 2,010
3. The fixed production overheads are budgeted at **Frw** 14,400,000 per annum.
4. Budgeted administration and selling costs are estimated at **Frw** 6million and **Frw** 3million per annum
5. The variable marketing costs are estimated at 10% of sales.

Required:

a) Profit statement for the month of August 2013 using
   i) Marginal costing **(8marks)**
   ii) Absorption costing **(8marks)**

b) Reconcile the profits obtained in (a) above **(4marks)**

(Total 20 marks)

QUESTION SIX

a) ALOMA Ltd produces and sells a product whose variable costs per unit are 0.4. The product selling price is **Frw** 80 per unit. ALOMA Ltd fixed costs are **Frw 6million.**

Required:

i) Determine the quantity to be sold to break even **(5marks)**

ii) Determine the profit realised for sales revenue of **Frw** 20million **(5marks)**

b) Draw a graph to illustrate the concept of break-even point in management accounting **(5marks)**

c) State the limitations of Cost-volume-profit (C-V-P) analysis **(5marks)**

(Total 20 marks)

QUESTION SEVEN

(a) Gen ltd manufactures three components A, B and C. The estimates of costs and revenues for each of the coming financial year are as follows:

	A	B	C	Total
	"000"	**"000"**	**"000"**	**"000"**
Sales	200	150	100	450
Cost of goods sold	100	75	60	235
Gross profit	100	75	40	215
Expenses				
Factory overhead	40	30	20	90
Selling & distribution costs	15	12	15	42
Head office admin costs	20	15	10	45
Total expenses	75	57	45	177
Net profit/loss	25	18	(5)	38

The factory overheads and 50% of the head office admin expenses are fixed and have been apportioned on the basis of sales value.

Required:

a) Should the company cease production of component C? **(12marks)**

b) Explain 4 factors a company should consider before discontinuing a product. **(8 marks)**

(Total 20 marks)

End of question paper