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## **CERTIFIED ACCOUNTING TECHNICIAN**

### **LEVEL 2 EXAMINATION**

### **L2.3: MANAGEMENT ACCOUNTING**

**TUESDAY: 9 JUNE 2015**

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#### **INSTRUCTIONS:**

- 1. Time Allowed: 3 hours 15 minutes** (15 minutes reading and 3 hours writing).
- This examination has **seven** questions and only **five** questions are to be attempted.
- Marks allocated to each question are shown at the end of the question.
- Show all your workings

## QUESTION ONE

Savannah Sugar Company has two production departments. There are two processes which produces the finished product. Raw materials are introduced initially at the commencement of Process 1 and further raw materials are added at the end of Process 2. Conversion costs accrue uniformly throughout both processes. The flow of the product is continuous, the completed output of Process 1 passes immediately into Process 2 and the completed output of Process 2 passes immediately into the finished goods warehouse.

The following information is available for the month of June:

<b>Process 1</b>	
Opening WIP	35,000 units
Materials	Frw 210,000
Conversion (2/5 complete)	Frw 52,500
Completion of units in June	168,000 units
Units commenced in June	140,000 units
<b>Closing WIP</b>	
(½ complete as to conversion)	7,000 units
Material introduced in June	Frw 770,000
Conversion cost added in June	Frw 630,000
<b>Process 2</b>	
Opening WIP	42,000 Units
Material from process 1	Frw 343,000
Conversion (2/3 complete)	Frw 392,000
Completion of units in June	154,000 Units
Units commenced in June	
Closing work in progress	
(3/8 complete as to conversion)	56,000 Units
Material introduced in June	Frw 462,000
Conversion costs added in June	Frw 2,205,000

### REQUIRED:

Give the cost of production report of Savannah Sugar Company Limited for the month of June, using FIFO methods, and showing clearly the cost of finished production and WIP at end of the period.

**(Total 20 Marks)**

## QUESTION TWO

a) An entity may be contemplating outsourcing production of one of its component to an external supplier. Outline five factors that such a firm must consider before deciding on outsourcing or manufacturing internally

**(10 Marks)**

b) Links Ltd has been reporting its profits using absorption costing system. During the financial year ended 30 September 2014, the following summary statement was provided:

	Frw.	Frw.
Sales (4,000 units)		5,000,000
<b>Cost of sales:</b>		
Opening stock (800units@Frw1200)	960,000	
Variable production costs	3,000,000	
Fixed production overhead	1,050,000	
Closing stock (550units@Frw 1200) =	<u>(660,000)</u>	<u>(4,350,000)</u>
Gross profit		650,000
<b>Expenses:</b>		
Variable selling and Admin	230,000	
Fixed selling and Admin	<u>180,000</u>	<u>(410,000)</u>
Net profit/loss		<u>240,000</u>

The fixed production absorption rate was Frw 280 per unit during the year. The budgeted output were 4,000 units. Cost structures have remained unchanged for the last five years.

**REQUIRED:**

- (i) Profit statement as per Marginal costing (6 Marks)
  - (ii) A reconciliation of the profits as per marginal and absorption costing (4Marks)
- (Total 20 Marks)**

**QUESTION THREE**

a) The data below was extracted from the books of Allay Limited for the financial year 2015. It shows the consumption per week of one of its product:

Maximum Consumption	400 Kg
Normal / Average Consumption	300 Kg
Minimum Consumption	200 Kg
Re-Order / Lead Time	4 - 6 days
Re-Order Quality	1500 Kg

**REQUIRED:**

Calculate the following stock levels

- (i) Reorder Level. (3 Marks)
  - (ii) Minimum Stock Level. (3 Marks)
  - (iii) Maximum Stock Level. (3 Marks)
  - (iv) Average Stock Level. (3 Marks)
- b) Define the term “Material Resource Planning” (2 Marks)
- c) Explain the requirements of an efficient material resource planning system (6 Marks)
- (Total 20 Marks)**

## QUESTION FOUR

The Rwanda Co produces three products, A, B and C, all made from the same material. Until now, it has used traditional absorption costing to allocate overheads to its products. The company is now considering an activity based costing system in the hope that it will improve profitability. Information for the three products for the last year is as follows:

	A	B	C
Production and sales volumes (units)	15,000	12,000	18,000
Selling price per unit	Frw 750	Frw 120	Frw 130
Raw material usage (Kg) per unit	2	3	4
Direct labour hours per unit	0.1	0.15	0.2
Machine hours per unit	0.5	0.7	0.9
Number of production runs per annum	16	12	8
Number of deliveries to retailers per annum	48	30	62

The price for raw materials remained constant throughout the year at Frw 120 per kg. Similarly, the direct labour cost for the whole workforce was Frw 148 per hour. The annual overhead costs were as follows:

	Frw
Machine set up costs	26,550
Machine running costs	66,400
Procurement costs	48,000
Delivery costs	54,320

### REQUIRED:

- (a) Calculate the full cost per unit for products A, B and C under traditional absorption costing, using direct labour hours as the basis for apportionment. **(5 Marks)**
- (b) Calculate the full cost per unit of each product using activity based costing. **(9 Marks)**
- (c) Using your calculation from (a) and (b) above, explain how activity based costing may help the Rwanda Co improve the profitability of each product. **(6 Marks)**

**(Total 20 Marks)**

## QUESTION FIVE

Explain the concept of “Management by Exception” with respect to variance analysis.

**(Total 20 Marks)**

## QUESTION SIX

John lives in Kigali and he manufactures commemorative medals. The following data relates to 2013:

	Frw
Selling price per medal	50
Variable production cost per medal	(30)
Variable selling cost per medal	(5)
Contribution per medal	15
Fixed production cost, based on annual sales of 20,000 medals	(5)
Fixed selling costs, based on annual sales of 20,000 medals	(1)
Profit per medal	<b>2</b>

### REQUIRED:

- (i) Calculate the level of production needed for John to break even. (10 Marks)
- (ii) John is thinking of doubling his production. To do so, he will have to occupy additional premises at an annual rent of Frw 210,000. What will be the new breakeven point and the margin of safety? (10 Marks)
- (Total 20 Marks)**

## QUESTION SEVEN

- (a) Identify the limitations of using budgeting systems to regulate business activities. (5 Marks)
- (b) Kamuhanda Limited manufactures one standard product. Currently it is operating on a normal activity level of 70% with an output of 6,300 units, although his Sales Director believes that a realistic forecast for the next budget period would be at a level of activity of 50%.

	60%	70%	80%
	Frw	Frw	Frw
Direct materials	37,800	44,100	50,400
Direct wages	16,200	18,900	21,600
Production overheads	37,600	41,200	44,800
Administration overheads	31,500	31,500	31,500
Selling and distribution overheads	42,300	44,100	45,900
Total cost	165,400	179,800	194,200

Profit is 10% of selling price.

### REQUIRED:

- i) Prepare a flexible budget based on a 50% level of activity. (12 Marks)
- ii) State three problems which may arise from such a change in the level of activity. (3 Marks)
- (Total 20 Marks)**

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## End of question paper

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