# INSTITUTE OF CHARTERED ACCOUNTANTS (GHANA)



MAY 2011 EXAMINATIONS (PROFESSIONAL)

PART 3

COST AND MANAGEMENT ACCOUNTING (Paper 3.3)

**Attempt ALL Questions** 

TIME ALLOWED:

Reading & Planning - 15 Minutes
Workings - 3 Hours

#### **QUESTION 1**

The limitations of the traditional costing system is believed to have been resolved by the introduction of Activity Based Costing (ABC).

## Briefly

(a) Explain and state **five (5)** merits of the ABC system.

(5 marks)

(b) Explain **three** (3) limitations of the traditional costing system.

(3 marks)

(c) Wunzoya Ltd manufactures "Shito" for the Ghanaian market. The following data relate to its main three markets; Accra, Kumasi and Tamale.

	Accra	Kumasi	Tamale
Gross margin	GHS30,000	GS32,000	GHS31,000
Units sold	825	825	825
Orders placed	800	1600	1050
Sales visits	120	110	130
No. of invoices	400	1000	1050

Total customer cost required to be allocated to various markets is GHS24,750.

Wunzoya has been using ABC costing system. The cost accountant has established the following cost driver rates to allocate customer costs.

Sales Visit : GHS10 per visit

Processing of orders : GHS2 per order placed Cost of dispatch : GHS2 per order placed Invoicing and debt collection : GHS3 per bill raised

Assuming that a traditional costing system would allocate customer cost on the basis of units sold,

- (a) Prepare a profitability statement based on ABC and rank the market in terms of profitability.
- (b) Prepare a profitability statement based on the traditional costing system and rank the market in term of profitability.

(12 marks)

## **JESTION 2**

SMT Ltd which uses the standard costing system has presented the details of the cost of a unit of its product.

	GHS
Direct material (10 kilos @ GHS0.40)	4
Direct labour (2 Hrs. @ GHS1.50 per Hr.)	3
Variable overheads (GHS2 per direct labour hour)	4
Fixed overhead (GHS5 per unit)	5
Total cost	16
Profit	4
Selling Price	_20

During the month of February 2010 the following report was prepared:

	Budget	Actual
Units produced and sold	4,500	5,000
Labour hours	9,000	8,200
Direct material cost (GHS)	18,000	22,500
Direct labour cost (GHS)	13,500	20,000
Variable overhead (GHS)	18,000	15,000
Fixed overhead (GHS)	22,500	22,500
Sales revenue (GHS)	90,000	110,000
Profit	18,000	_30,000

**Required**: Calculate the following variances:

- (a) i. Fixed Overhead Variance analysed into Expenditure, Volume, Volume Capacity and Volume Efficiency Variance.
  - (10 marks)
  - ii. Sales Margin Price and Sales Margin Volume Variances

(4 marks)

(b) State **three** (3) reasons why total material cost variance should be analysed into price and usage.

(6 marks)

## **QUESTION 3**

(a) Sabbat Ltd manufactures beds for students in a private hostel. The following information relates to the activities of the company from January to June 2010:

	GHS
Selling price per unit of product	2,000
Variable cost per unit of product	800
Fixed manufacturing cost 1 month	300,000
Non-manufacturing cost 1 month	100,000

There were no opening stocks in January.

Normal production level in Sabbat Ltd is expected to be 1,500 beds per month, and production and sales for the period to June 2010 is presented below:

	<u>January</u>	<u>February</u>	March	<u>April</u>	May	<u>June</u>
Units sold	1,500	1,200	1,800	1,500	1,400	1,600
Units produced	1,500	1,500	1,500	1,500	1,700	1,400

## Required:

- (A) Prepare an Income Statement for Sabbat Ltd for each month based on the:
  - (i) Marginal Costing System
  - (ii) Absorption costing System
- (B) Explain the difference in profit of the two methods.

(14 marks)

- (b) For the purpose of control, responsibility centres may be grouped into three:
  - 1. Cost Centre
  - 2. Profit Centre
  - 3. Investment Centre

## Required:

Briefly explain these concepts and state how divisional managers could be evaluated under each concept.

(6 marks)

#### **ESTION 4**

- a) Discuss the following terms as they relate to cost-volume-profit (CVP) analysis.
  - i. Relevant Range
  - ii. Contribution
  - iii. Break-even Point
  - iv. Margin of Safety

(6 marks)

(b) Explain four (4) criticisms levelled against CVP analysis in decision making.

(4 marks)

(c) Modern Ltd produces chairs for schools and churches in Kumbungu. The information below relates to sales and profit figures for the years 2008 to 2010.

Year	Quantities	Sales (GHS)	Profit (GHS)
2008	1,500	350,000	70,000
2009	1,700	487,000	60,000
2010	3,000	699,990	209,990

Using the above information provided, compute the following;

- i. Variable Cost per Unit
- ii. Total variable cost for production of 3,000 chairs
- iii. Calculate the total fixed costs

(10 marks)

(Total: 20 marks)

#### **QUESTION 5**

Awako Ltd is a company that manufactures machine parts. Adamu Ltd has offered them a year contract to produce a special type of part for one of its machines. Awako Ltd has an existing machine that was purchased about 10 years ago and it can only be used for the contract offered by Adamu ltd.

The machine has so far been depreciated by GHS10,000. Meanwhile, its original cost was GHS24,000. The value of the machine in the books of Awako Ltd is GHS14,000. However, it could be sold now for GHS7,000 or in a year's time for GHS1,000.

If Awako Ltd accepts the contract, it would need four (4) different types of materials which are listed below:

	<u>A</u>	$\underline{\mathbf{B}}$	<u>C</u>	$\underline{D}$
In stock (units)	1,400	400	2,800	2,000
Required for contract (units)	500	1,300	400	1,400
Purchase price of stock (GHS)	1.80	0.75	0.50	1.80
Current replacement cost (GHS)	1.50	2.80	0.80	2.0

A and D are in regular use within the company. B could be sold for GHS2.10 if not used for the contract and there are no other uses for C, which has been deemed to be obsolete.

## Required:

(a) Compute the relevant costs in respect of the contract offered by Adamu Ltd and explain the bases for your answers.

(16 marks)

(b) State the **four (4)** stages of the Decision making process.

(4 marks)