THE INSTITUTE OF CHARTERED ACCOUNTANTS (GHANA)

MAY 2010 EXAMINATIONS
(PROFESSIONAL)

PART 3

COST AND MANAGEMENT ACCOUNTING
(Paper 3.3)

Attempt ALL Questions

TIME ALLOWED:

Reading & Planning	-	**15 Minutes**
Working	-	**3 Hours**

QUESTION 1

Budgeting and Budgetary Control are important management accounting techniques which can benefit all forms of business enterprise if fully understood and properly operated.

Required:

a) (i) Explain **three (3)** benefits derived from budgeting.

(ii) Explain **three (3)** objectives and **three (3)** limitations of Budgetary Control.

(*9 marks*)

b) SN Ltd manufactures product X. An estimate of the number of units expected to be sold in the first four months of the year are: January 500, February 600, March 800, and April 1,000.

It is anticipated that:

(i) There will be no work-in-progress at the end of any month, and

(ii) Finished units equal to half the anticipated sales for the next month will be in stock at the end of each month including December last year.

The budgeted production and production costs for the year are as follows:

Direct materials per unit	GH¢12
Direct wages per unit	GH¢5
Other manufacturing charges	GH¢33,000

Prepare a Production Budget showing the number of units to be manufactured each of the first three months.

(*5 marks*)

c) Outline the relationship between Budgetary Control and Standard Costing and identify the managerial procedures identical to these techniques.

(*6 marks*)

(Total: 20 marks)

QUESTION 2

a) K Ltd is considering producing computers in 12 hours with a variable cost of GH¢20. The supplier price per computer is GH¢40. If K Ltd decides to make the computer it will mean sacrificing the production of its own product printer which takes 50 hours to make and has a variable cost of GH¢300 and selling price of GH¢400.

Advise whether K Ltd should buy the computer or make it.

(*10 marks*)

b) A company blends three raw materials M, N, O, for its final product in the proportion of 2:3:5.

When 20 kilograms of all the inputs are put into process 18 kilograms of finished products are turned out.

The standard cost of the materials are as following

M GH¢2.5 N GH¢1.8 O GH¢1.00

In the month of February 2010 the actual results were as follows

	Units	Price (GH¢)
M	16,500	2.25
N	25,000	1.60
O	39,500	1.40
	80,000	

The actual output for the month was 70,000 kilograms. 1000 kilograms of material O was left as closing stock.

Required:

Calculate the Material Price, Mix and Yield Variances.

(*10 marks*)

(Total: 20 marks)

QUESTION 3

Ewiase Co Ltd is considering the introduction of a new product with the following cost and revenue structure:

i. The product will be sold for GH¢1,000 per unit.

ii. A machinery costing GH¢1 million would be required with a useful life of 8 years with zero residual value at the end of the period.

iii. Working capital requirements are estimated at GH¢250,000.

iv. Variable costs per unit is estimated at GH¢800 and fixed costs per annum other th... depreciation and development expenditure stood at GH¢300,000.

The following additional information is available:

(a) The research department had developed the new product at a cost of GH¢500,000. There is known to be a strong demand for the product and this demand will last for 5 years and then collapse due to forecast technological change.

(b) The maximum production capacity is 6000 units per annum. The sales director is confident that the company will be able to sell all the items produced. The finance director disagrees and points out that the company rarely manages to operate at more than 90% capacity and that, anyway, the company is unlikely to be able to sell more than 5000 units per annum.

Required:

(a) Calculation of:
   i. the annual level of sales, in units, required to produce a return of 20% per annum on the original investment.
   ii. the annual profit, assuming maximum production
   iii. the margin of safety as a ratio.

(12 marks)

(b) Outline the nature and purpose of break-even analysis.

(4 marks)

(c) Outline the limitations leveled against the CVP or B/E Analysis.

(4 marks)

(Total: 20 marks)

QUESTION 4

Sikapa International Services has four branches. The following Income Statement for the year ended 2009 was presented by the Financial Accountant.

Branches	A	B	C	D	Total
	GH¢	GH¢	GH¢	GH¢	GH¢
Revenue	86,000	92,000	102,000	110,000	390,000
Cost of Sales	64,000	72,000	80,000	94,000	310,000
Gross Profit	22,000	20,000	22,000	16,000	80,000
Selling & Administrative Cost	8,000	6,000	12,000	18,000	44,000
Net Income	14,000	14,000	10,000	(2,000)	36,000

Notes to the Accounts

(i) Specific cost of sales are A GH¢9,000 B GH¢12,000 C GH¢11,000 D GH¢13,000.

(ii) Variable cost of sales is 50% of sales Revenue

(iii) Variable selling and Administrative cost is 5% of sales Revenue.

Management is proposing to close Branch D on the basis of poor performance. It is believed that when Branch D is closed the resources could be used to increase the revenue of Branch C by 40% when sales in a Branch increases more than 25% specific fixed cost will increase by 20%.

Required:

(a) Based on quantitative factors advise management whether to retain or close Branch D. *(**16 marks**)*

(b) Identify **four (4)** qualitative factors that should be considered in taking such decisions. *(**4 marks**)*

QUESTION 5

Wahab Ventures has been in business for over ten years. The company's assets and profit at the end of December 2009 were as follows:

	GH¢
Fixed Assets (Book Value)	300,000
Net Current Assets	40,000
	340,000
Net profit before Tax	64,000

The Fixed Assets consist of five separate items each costing GH¢60,000 which are depreciated to zero over 5 years on a straight line basis.

For each of the past years on 31st December, it had bought a replacement for the asset that had just been withdrawn and it proposes to continue this policy.

The assets manufacturer has been able to keep his prices constant over time because of technological advancement.

The directors of the company believe that there will be no changes in the data presented above. However, the following opportunities are available.

(i) An investment costing GH¢60,000 which would yield an annual profit of GH¢10,000.

(ii) An asset that currently earns GH¢3,900 annually would be sold at a price equal to its written down book value of GH¢24,000.

The company's cost of capital is estimated at 15%.

***Required*:**

(a) Calculate the new ROCE and RI if the investment was undertaken.

(*6 marks*)

(b) Calculate the new ROCE and RI if the assets were sold.

(*6 marks*)

(c) State with reasons whether you would recommend that the investment be undertaken or the asset should be sold.

(*4 marks*)

(d) Identify and explain some of the reasons for decentralisation.

(*4 marks*)

(Total: 20 marks)