



**CHRISTIAN SERVICE UNIVERSITY COLLEGE  
KUMASI, GHANA**

**CSUC SCHOOL OF BUSINESS**

**DEPARTMENT OF ACCOUNTING AND FINANCE**

**MSC ACCOUNTING AND FINANCE**

**END OF SECOND SEMESTER EXAMINATIONS – 2021/22 ACADEMIC YEAR**

**LEVEL 500**

**MACF 504: MANAGEMENT ACCOUNTING  
JANUARY ADMISSION**

**AUGUST, 2022**

**80 MARKS**

**3 HOURS**

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**GENERAL INSTRUCTIONS TO CANDIDATES:  
THERE ARE FOUR (4) QUESTIONS IN ALL  
YOU ARE TO ANSWER TO ATTEMPT**

**QUESTION ONE**

Quickspray Ltd offers professional car spraying services at Suame Magazine. The company is planning its activities for the month of June 2018 for its saloon car spraying section. The company charges service fee of GH¢1,000 and incurs fixed cost (excluding fixed maintenance cost) and variable cost per unit (excluding variable maintenance cost) of GH¢35,000 and GH¢644.39 respectively for spraying of a saloon car.

The following data also relates to Quickspray Ltd on the maintenance hours of its key machine, revenue and profit for the six months ended April 2018.

Month	Maintenance Hours	Revenue (GH¢)	Profit(GH¢)
November, 2017	1,200	19,000	700
December, 2017	1,425	24,000	1,425
January, 2018	1,410	20,100	650
February, 2018	1,400	20,000	1,000
March, 2018	1,175	18,000	(125)
April, 2018	1,275	19,000	175

Total fixed cost increases by GH¢1,120 when maintenance hours go beyond 1,400.

**Required:**

- a) Determine the total maintenance cost of production, using high-low method if;
  - i) Maintenance hours of May was budgeted to be 1,520. **(5 marks)**
  - ii) Maintenance hours of June is budgeted to be 1,075. **(5 marks)**
- b) Calculate for the month of May the;
  - i) Break-even point in units and value **(4 marks)**
  - ii) Sales level in order to make an after-tax profit of GH¢21,150, assuming Quickspray Ltd is in the 25% tax bracket. **(4 marks)**
  - iii) Margin of safety if the target after-tax profit of GH¢21,150 is achieved. **(2 marks)**

**QUESTION TWO**

- a) The Management Accountant plays an important role in the modern business environment and his/her activities may be categorized as providing information under the key headings of planning, control and decision making.

You have just been appointed to a new role as Management Accountant in Akwaba Ltd, a large engineering company producing a wide range of parts for the automobile industry. This new role has been created following a majority decision of the Board of Directors based on the advice of the company's auditors. However, the Managing Director comes from a marketing background and does not understand why the company needs another accountant as there is already a Financial Accountant employed on a full time basis. She voted against the creation of the new position and considers the cost of your remuneration to be an unwelcome burden which will only serve to reduce the company's reported profits. According to her the equation  $Y = a - bx$  which management accountant always uses are not relevant in modern day business environment.

You are aware of the strong opinion of the Managing Director and as your first task, you decide to attempt to convince her of the importance of Management Accounting in the modern business environment and also suggest some ways that you can ensure your future role in Akwaba Ltd is financially viable.

**Required:**

Prepare a Memorandum to the Managing Director in which you address her concerns using the following guidelines:

- i) Distinguish clearly between *Financial Accounting* and *Management Accounting* under any **FOUR** different headings. **(6 marks)**
  - ii) For each of the **THREE** key headings of planning, control and decision making; outline one Management Accounting technique and how it would lead to stronger commercial success for the company. **(6 marks)**
  - iii) Identify any **THREE** qualitative (non-financial) issues that you should consider as a Management Accountant when providing information for decision making in Akwaba Ltd. **(2 marks)**
- b) Identify and explain briefly **THREE** similarities and **TWO** differences between *activity-based costing* and the *traditional system* of assigning overheads to products. **(6 marks)**

**(Total: 20 marks)**

**QUESTION THREE**

- a) Smooth Sailing Ltd is a medium size company that specialises in the construction of iron gates for clients. It has three production departments through which all jobs are processed, Assembling, Welding and Finishing. The following data relates to the year ended 30 September, 2015:

**Budgeted Data:**

	Assembling	Welding	Finishing
Overheads (GH¢)	64,050	108,900	83,520
Direct labour hours	-	-	14,400
Machine hours	5,250	6,600	-

Job CA2 was undertaken during the last month of the year recording the following:

**Direct materials:**

	GH¢
From stores	16,500
Bought-in	12,600

**Direct labour:**

Assembling 450 hours @  
GH¢8/hr

Welding 535 hours @  
GH¢8/hr

Finishing 1235hours @  
GH¢6/hr

**Machine hours:**

Assembling 425

Welding 532

Finishing .....

Trials and testing cost of GH¢5,400 is incurred on each job.

It is company policy to make a mark-up of 50% of profit on each job.

**Required:**

- i) Calculate an appropriate *overhead absorption rate* for each department for the year ended 30 September, 2015; and **(5 marks)**
  - ii) Determine the total costs, and hence, the price of Job CA2. **(10 marks)**
- b) Most products go through five stages in their life namely, Development, Introduction, Growth, Maturity and Decline. These stages have helped in the design of marketing strategies and it is now believed that it can be equally useful for accountants in the determination of the cost of products.

**Required:**

Identify **FIVE** benefits of product life cycle costing. **(5 marks) (Total: 20 marks)**

**QUESTION FOUR**

- a) Pinto company Limited processes materials into finished products. After process one, two main products PEF and CEF are turned out. The production processes allow for 10% normal loss at process one and 5% for each product if it is to be processed further. The scrap at process one can be sold for GH¢6.60 per unit. The standard prices of the products are as follows; PEF to be sold at split off point GH¢17 per unit but can be sold for GH¢28 per unit after further processing. A unit of CEF can also be sold for GH¢16 at split off point or GH¢ 25 after further processing. Further processing costs are; PEF; direct materials GH¢4 per unit and conversion GH¢3.50 per unit. The materials and conversion costs per unit for CEF are GH¢5 and GH¢4 respectively.
- In the month of August 2016 6,000 units were processed through process one at the following costs; direct materials GH¢40,000, conversion GH¢32,000. The output at the end of process one were 3,000 units for PEF and 2,000 units for CEF.

**Required:**

Advise management which of the products should be processed further and which should be sold at split off point if volume is used to share common cost.

**(12 marks)**

- b) The use of relevant information is key to managerial successes. Describe *relevant costs* to your newly appointed Managing Director who will be negotiating a new contract. **(3 marks)**
- c) Explain the following concepts and describe their application in responsibility accounting:
- i) The controllability principle **(2.5 marks)**
  - ii) Budgetary slacks **(2.5 marks)**

**(Total: 20 marks)**

**QUESTION FIVE**

- a) Santo has three product lines: P1, P2 and P3. Since its inception, the company has been using a single direct labour cost percentage to assign overhead costs to products.

Despite P3 being a relatively new product line, it is attracting additional business. However, increasing overhead costs has resulted in loss-making in recent times. P2 particularly has been a significant product line since its inception. However, it has lost a considerable market share due to an increase in overhead cost in recent times and consequent increase in price per unit. Management is, therefore, convinced that the costing system needs some review.

A team led by the management accountant was put together to develop an improved system of costing based on activities. The team spent several weeks collecting data for the different activities and products.

Below is data on Santo's three product lines and overhead costs for the current accounting period:

	<b>P1</b>	<b>P2</b>	<b>P3</b>
Production volume (units)	7,500	12,500	4,000
Selling price per unit (GH¢)	47	80	68
Material cost per unit (GH¢)	18	25	16
Direct labour cost per unit (GH¢)	4	8	6.4
Materials movements (in total)	4	25	50
Machine hours per unit	0.5	0.5	0.2
Set-ups (in total)	1	5	10
The proportion of engineering work	30%	20%	50%
Orders packed (in total)	1	7	22

**Activities overhead cost:**

	<b>GH¢</b>
Machine maintenance and depreciation	390,000
Material receiving and handling	150,000
Engineering	100,000

Packing	60,000
Set-up labour	<u>18,688</u>
<b>Total</b>	<b><u>718,688</u></b>

**Required:**

Identify for each overhead activity, an appropriate cost driver from the information supplied, and then calculate the product unit costs using a system that assigns overheads based on the use of activities.

**(10 marks)**

- b) The Estate Manager of Swift International Company was charged to coordinate the procurement process for the award of a contract to construct a warehouse for the company. In the process, the Chief Executive Officer (CEO) called on the manager to ensure the contract is awarded to Gyidi Construction Works, whose owner is the CEO's friend. When the bids were evaluated, Gyidi placed fourth in terms of responsiveness but being guided by the CEO's directive, the project was awarded to Gyidi Construction Works. Being guilty of not acting professionally, the estate manager admitted that he had acted unethically.

**Required:**

Identify and explain **FOUR (4)** threats to ethical behaviour as a Management Accountant.

**(10 marks)**

**(Total: 20 marks)**

**QUESTION SIX**

- a) Jungle Twist Ltd manufactures quality blocks for the housing industry in Ghana. It operates a standard marginal costing system. The following standard costs, volume and revenue data for the quarter ending 31 October, 2015 are provided:

**Standard cost card:**

Selling price		GH¢18
per block Costs:		
Direct material	P	3 kg at GH¢2.60 per kg
	Q	2 kg at GH¢2.50 per kg
Direct labour		2 hours at GH¢0.60 per hour

Budgeted sales for the quarter: 62,500 blocks

Variable overheads are absorbed at the rate of GH¢0.50 per direct labour hour. Fixed production overhead for the quarter are estimated to be GH¢78,500

The following actual results were recorded for the quarter just ended 31 October, 2015:

Production	:	60,000 blocks
Sales	:	58,000 blocks
Price	:	GH¢17.00 per block
Direct material	P	150,000 kg were bought and used at GH¢360,000
	Q	109,000 kg were bought and used at GH¢327,000

Direct labour 108,000 hours were worked for at a cost of GH¢90,400

Variable overheads           GH¢82,000  
Fixed production overheads GH¢80,000

**Required:**

Calculate the following variances for the quarter just ended 30 September, 2015 the:

- i) Sales volume and sales price variances; **(3 marks)**
  - ii) Price and usage variances for each material; **(3 marks)**
  - iii) Mix and yield variance for each material; **(3 marks)**
  - iv) Labour rate, labour efficiency and idle time variances; and **(3 marks)**
  - v) Variable overheads expenditure and variable overheads efficiency variances. **(3 marks)**
- b) Describe the *balanced score card approach* to performance measurement. **(5 marks)**

**(Total: 20 marks)**