

COST AND MANAGEMENT ACCOUNTING 2
7010

GENERAL CERTIFICATE OF EDUCATION BOARD
Technical and Vocational Education Examination

JUNE 2021

ADVANCED LEVEL

Specialty Name (Specialty Code)	ACCOUNTING (ACC)
Subject Title	COST AND MANAGEMENT ACCOUNTING
Paper No.	2 – COST ACCOUNTING
Subject Code No.	7010

Three hours

INSTRUCTIONS TO CANDIDATES

This Paper has SIX Questions.

Each question carries 20 marks.

You are required to Answer Any **Five** Questions of your choice, starting each new Answer on a New Page.

If you answer MORE THAN five (5) Questions, ONLY the first five will be marked and the other cancelled

You are allowed to use **GRAPH PAPERS** and **CALCULATORS**.

Charts of accounts are **NOT ALLOWED** for this paper.

You must use **ONLY** Blue or Black ink. No answer in Pencil will be marked.

All Appendices filled or completed should be slotted in the answer booklet.

Do not write your name or candidate number on the appendices

All necessary calculations must be shown.

You are reminded of the necessity for good English and orderly presentation in your answers.

You are advised to read carefully through the question paper, before you begin your answers.

1. SOPALM is a production enterprise that deals with the production of palm oil. For the production of 1,000 liters, the following cost was incurred:

- Raw material cost: 300 units at 1,250 CFAF per unit.

- Direct labour:

Workshop 1: 1,000 hours at an hourly rate of 600 CFAF.

Workshop 2: $\frac{2}{4}$ hours of workshop 1 at an hourly rate of 400 CFAF.

- Direct expenses: 275,000 CFAF

- Selling and distribution overhead is 10% of production cost.

- The profit margin is 20%

The overhead expenses incurred in the production process is as follows:

Overhead Apportionment table

Elements	Amount	Auxiliary centre		Principal centre	
		Administration	Maintenance	Workshop 1	Workshop 2
Primary total	7,000,000	750,000	1,250,000	3,000,000	2,000,000
<u>Secondary Apportionment:</u>					
- Administration		-	20%	50%	30%
- Maintenance		15%	-	45%	40%
Overhead absorption basis				Direct labour hours	Direct labour hours

Required:

i) Complete the overhead apportionment table

(10 marks)

ii) Prepare a cost statement showing clearly the prime cost, production cost and total cost.

(8 marks)

iii) Calculate the costing result

(2 marks)

(Total 20 marks)

2. An industrial company manufactures from a raw material two products: type B and D in two workshops. The data relating to the activity of the month of January 2020 were as follows:

a) Stocks at the beginning of the month:

- Raw materials 35,000kg at 30 CFAF a kg
- Consumable stores 4,200 CFAF
- Product type B 600 units at 2,587.5 CFAF a unit
- Product type D 200 units at 3,977.5 CFAF a unit

b) Charges of the period:

- Purchase of raw materials 25,000 kg at 26.8 CFAF a kg
- Purchase of consumable stores 25,200 CFAF
- Purchase of none storable stationeries 55,000 CFAF
- Direct labour for the two workshops 1,230,000 CFAF (the hourly rate is 165 CFAF)

c) Sales:

- Product type B 700 units for 2,540,000 CFAF
- Product type D 600 units for 2,710,000 CFAF

d) Consumption of the month:

- In the melting workshop: 36,000 kg of raw materials and direct labour for 920,000 CFAF for the manufacturing of 1,000 units of rough products.
- In the finishing workshop: 450 units of rough products for the production of type B products and 550 units of rough product for the production of type D products.
- The hours of direct labour in the two workshops are 1,550 hours for type B product and 4,450 hours for type D product.

e) Production of the month: 400 type B and 500 type D

f) Break down table of indirect charges:

charges	Main sections				
	Supplying	Melting	Finishing	Distribution	Administration
Secondary totals	172,500	144,920	141,705	323,765	95,420
Nature of work unit	Kg of raw material purchased	Unit of rough products	Hours of direct labour	Cost of production of products sold	Cost of production of products sold
Number of units	25,000	1,000	6,000	3,801,734	3,801,734

Required:

Knowing that the exits of raw materials and finished goods from the warehouse are valued using the weighted average method, calculate:

- i) The purchase cost of raw material using appendix 1 (to be submitted) (2 marks)
- ii) The inventory account of raw material using appendix 2 (to be submitted) (2 marks)
- iii) The cost of production of rough product using appendix 3 (to be submitted) (3 marks)
- iv) The production cost of product type B and type D knowing that the cost of rough products is shared to the two products proportionally to their number of hours of direct labour using appendix 4 (to be submitted) (6 marks)
- v) The inventory account of finished products using appendix 5 (to be submitted) (3 marks)
- vi) The cost price of product type B using appendix 6 (to be submitted) (2 marks)
- x) The costing result of product type B using appendix 7 (to be submitted) (2 marks)

(Total 20 marks)

3. In July 2020, the following costs were incurred by DODO Ltd.:

- Materials (30,000 units) 24,900,000 CFAF
 - Labour and overheads 20,075,000 CFAF
- At the beginning of July, there 15,000 units of work in progress valued as follows:
- Materials (100% complete) 9,000,000 CFAF
 - Labour and overheads (40%) complete 1,250,000 CFAF
- At the end of July, there were 5,000 units of work in progress. 100% complete for materials and 50% complete for labour and overheads. There were no losses and the firm uses weighted average approach.

Required

- (i) Calculate the number of units that were completed in July 2020 (3 marks)
- (ii) Calculate the equivalent unit and the cost per unit (14 marks)
- (iii) Value the finished items and the closing work-in-progress (3 marks)

(Total 20 marks)

4. A Bamenda based company produces two products: a major computer par and cell phones. The company uses a normal cost system and overhead costs are currently allocated using a plant-wide overhead rate based on direct labour hours. Outside cost consultants have recommended however that the company use activity based costing to charge overhead to products.

Expected production: 4,000 computer parts
2,000 cell phones

Turn Over

Direct labour: 2 hours per computer part
0.5 hour per cell phone

The direct material and direct labour costs included in the two products are as follows:

Items	Computer part (CFAF)	Cell phone (CFAF)
Direct material per unit	30	17
Direct labour per unit	16	4

Budgeted total factory overhead data for 2020

Activity	Budgeted overhead (CFAF)	Estimated volume level
Production set ups	80,000	40 set ups
Material handling	70,000	5,000
Packaging and shipping	160,000	4,000 boxes
Total factory overhead	310,000	

Based on an analysis of the three overhead activities, it was estimated that the two products would require these activities as follows in 2020:

Activity	Computer parts	Cell phone	Overall total
Production set ups	10 set ups	30 set ups	40 set ups
Material handling	1,000	4,000	5,000
Packaging and shipping	3,000 boxes	1,000 boxes	4,000 boxes

Required:

- Calculate the unit cost of each product using a complete costing with overhead absorption based on direct labour hours. (6 marks)
- Calculate the activity cost-rates for:
 - Setups
 - Material handling
 - Packaging and shipping using Appendix 8 (to be submitted) (3 marks)
- Determine the cost of the two products using an activity based costing system using Appendix 9 (to be submitted) (7 marks)
- If the selling price is 300 CFAF and 250 CFAF for computer parts and cell phone respectively, calculate the profit using Appendix 10 (to be submitted) (4 marks)

(Total 20 marks)

5. K LW company recorded the cost of water consumption as follows:

Water consumed (gallons)	Total cost (CFAF)	Retail price index
2,000	12,500	100
4,000	20,000	102
3,000	18,500	103
1,000	8,000	104

Required: Using the high low method:

- Calculate the variable cost per unit (5 marks)
- Calculate the fixed cost (3 marks)
- Determine the total cost of water in the linear equation form as $Y = a + bx$ (3 marks)
- Calculate the total cost when 3,500 and 5,000 gallons of water are consumed, and their retail price indices are 106 and 108 respectively (9 marks)

(Total 20 Marks)

6. Ten employees work as a group. When production of the group exceeds the standard of 200 pieces per hour, each employee in the group is paid a bonus for the excess production in addition to the wages at hourly rates. The bonus is computed thus: the percentage of production in excess of standard quantity is found, and one half of the percentage is regarded as the employee's share. Each employee in the group is paid as bonus this percentage of a wage of 520 CFAF per hour. There is no relationship between the individual worker's hourly rate and the bonus rate. The following is one week's record:

	Hours worked	Production
Monday	90	24,500
Tuesday	88	20,600
Wednesday	90	24,200
Thursday	84	20,100
Friday	88	20,400
Saturday	40	10,200
	480	120,000

During this week, Akum worked 42 hours and was paid 300 CFAF per hour.

Required: Determine

- The bonus rate for the week
- The total bonus for the week
- The total pay for Akum for the week

(10 marks)

(5 marks)

(5 marks)

(Total 20 marks)

Turn Over

APPENDICES TO BE FILLED AND SUBMITTED

Appendix 1: for question 2 (i) Purchase cost of raw materials

Elements	Qty	Up	Amount
Purchase price			
Supplying expenses			
Purchase cost			

Appendix 2: for question 2 (ii) Inventory of raw materials

Elements	Qty	Up	Amount
Initial stock			
Purchase cost			
Total stock			
Consumption (exits)			
Final stock			

Appendix 3: for question 2 (iii) Production cost of rough products

Elements	Qty	Up	Amount
Raw materials consumed			
Direct labour			
Melting expenses			
Production cost			

Appendix 4: for question 2 (iv) Production cost of finished type B and type D products

Elements	Type B product			Type D product		
	Qty	Up	Amount	Qty	Up	Amount
Rough products used						
Direct labour						
Overhead expenses of finishing						
Production cost						

Appendix 5: for question 2 v. Inventory account of finished products

Elements	Type B product			Type D product		
	Qty	Up	Amount	Qty	Up	Amount
Initial stock						
Production cost (entries)						
Total stock						
Sales (exits)						
Final stock						

Appendix 6: for question-2 (vi) Determination of the cost price of product type

Elements	Type B product		
	Qty	Up	Amount
Production cost			
Distribution cost			
Administrative expenses			
Cost price			

Appendix 7: for question 2 (vii). Determination of the costing result for product type B

Elements	Type B product		
	Qty	Up	Amount
Selling price			
Cost price			
Result			

Appendix 8 – for question 4(ii) activity rates for setups, material handling and packaging and shipping

Activity	Budgeted overhead	Estimated volume	Cost rates

Appendix 9- for question 4(iii) cost of the two products using activity based costing system

Cost items	Computer parts			Cell phone		
	Qty	up	Amount	Qty	up	Amount

Appendix 10- for question 4(iv) calculation of profit

Cost items	Computer parts			Cell phone		
	Qty	U.P	Amount	Qty	U.P	Amount
