



Department of Commercial Accounting

Cost and Financial Management 2B

CFM22B2

SUPPLEMENTARY LAST ASSESSMENT OPPORTUNITY DECEMBER 2014

Time: 180 minutes

Marks: 100

Assessors: Mrs M Vermaak

Mr RJ Rhodes

Moderator: Mr R Boersma (Internal)

INSTRUCTIONS:

- This paper consists of 7 pages (including the cover page)
- Answer all questions. Show all formulae, calculations and workings clearly.
- Please start each question on a new page.
- Silent, non-programmable calculators may be used.
- Where applicable, round all calculations to **two decimal** places, unless stipulated otherwise.

Question	Topic	Marks	Time
1	Process costing	30	54 Minutes
2	Joint and by-products	20	36 Minutes
3	ABC costing	15	27 Minutes
4	Job costing	15	27 Minutes
5	Direct and Absorption costing	20	36 Minutes
		<hr/> 100	<hr/> 180

QUESTION 1:**30 Marks**

Happimag Limited manufactures fruit juice products in two processes using the WAM inventory calculation method.

Materials are added to the process as follows:

In process A (preparation), the fruit pulp is added at the beginning of the process. The pulp is then pressed, and all the solids are drained off. The fruit juice then goes through a process of moisture reduction before the sweeteners are added at 75% of the process. The mass of the sweeteners is the same as the mass of the solids drained off plus the moisture reduction. The mixture is then cooled and put in holding tanks in preparation for process B.

In process B the mixture is heated to UHT temperatures to sterilize the concentrate before being packed into 20-litre tins at 25% of the process. The tins are then fed through the cooling process before having a final inspection for leakages and being sent off to the stores for distribution.

All conversion costs are incurred uniformly throughout the processes. No spoilage takes place.

The following relates to the activities for August 2014:

Units	Process A	Process B
Beginning WIP	15 000	12 000
Stage of Completion	60%	55%
Started	486 000	?
Ending WIP	26 000	7 000
Stage of completion	80%	70%

Cost (R)	Total Cost	Cost per Equivalent Unit
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Beginning WIP:		
Cost transferred from Process A	-	R222 000
Fruit pulp	R180 000	-
Sweeteners	-	-
Packaging	-	R24 000
Conversion costs	R45 000	R26 400
Costs added during March:		
Cost transferred from Process A		
Fruit pulp		R9 488 000
Sweeteners	R6 075 000	-
Packaging	R1 002 000	-
Conversion costs	-	R1 187 500
	R2 677 400	R1 913 200

REQUIRED:

- 1.1. Draw the timeline for the both production processes, clearly indicating the material input, and map the flow of units. (3)
- 1.2. Prepare the cost and production statement for the process 1 by using the 5 steps.
 - 1.2.1. Step 1: Flow of units (2)
 - 1.2.2. Step 2: Equivalent units (5)
 - 1.2.3. Step 3: Cost flow (2)
 - 1.2.4. Step 4: Cost per equivalent units (4)
 - 1.2.5. Step 5: Cost and production statement (10)
- 1.3. Prepare step 1 and 2 for process 2. (7)

QUESTION 2:**20 MARKS**

Cow Ltd manufactures three products in a single process.

The input of raw material is made up of a batch size of 500 litres, giving rise to an output of 300 litres of Full Cream Milk, 150 litres of Low Fat Milk and 50 litres of Gee. Gee is treated as a by-product. The October 2014 monthly production costs and selling prices at a capacity level of 30 batches are as follows:

	Full Cream Milk	Low Fat Milk	Gee
Selling price per litre after further processing	R9.80	R11.20	R2.50
Further processing cost	R3.50	R4.20	
Output	30 batches		

At the beginning of the month we had 600 litres of full cream milk and 300 litres of Low fat milk. We sold 8500 litres of full cream milk and 4600 litres of low fat milk.

Joint costs total R82 000.

REQUIRED:

- 2.1 Allocate the joint costs to the two joint products using
- a) Physical units (5)
 - b) Relative Market value at split off point (6)
- 2.2 Calculate the gross profit for Low fat milk if we use Market Value at split off point to allocate the joint cost. (8)
- 2.3 Which method of Cost allocation will you recommend to Cow Ltd? (1)

QUESTION 3:**15 MARKS**

The following information provides details of the costs, volume and cost drivers of Sony Ltd for 2014.

COST POOL	COST POOL	COST DRIVERS	TOTAL OF DRIVER FOR THE YEAR
Materials handling	R1 250 000	Number of moves	125
Machine set-ups	R1 500 000	Set-up hours	500
Inspection	R1 250 000	Number of inspections	250

The following information is in respect of two of their products for September 2014:

ITEM	Laser Printers	Deskjet Printers
Direct Material cost	R500 000	R375 000
Direct Labour cost	R400 000	R275 000
Number of units	1 000	750
Direct Labour hours	320	200
Machine hours	350	325
Number of material moves	20	8
Number of set-up hours	40	20
Number of inspections	20	10

REQUIRED:

- 3.1 Calculate the overhead recovery rate per activity. (4)
- 3.2 Allocate the overhead costs to the both printers . (8)
- 3.3 Calculate the total and cost per unit of one Laser printer. (3)

QUESTION 4**15 MARKS**

On 1 October 2014 Mr Spider has three jobs in progress. Customer Mortein, Doom and Target. Mr Spider budgeted to spend R2 000 on manufacturing overheads. Manufacturing overhead costs are recovered based on budgeted direct labour cost (R6 000).

Details concerning the three jobs for October are as follows:

	Customer Mortein	Customer Doom	Customer Target
Work in process, October 1:	R4 050	R3 800	R2 950
Production costs incurred during October:			
Direct material used	R1 000	R1 800	R1 000
Direct labour	R1 600	R2 000	R1 200
Applied Manufacturing overheads	?	?	?

By 31 October 2014, only the job for Customer Doom was completed.

The actual manufacturing overhead cost for October amounted to R1 500.

REQUIRED

- 4.1. Calculate the predetermined manufacturing overhead rate for Mr Spider. (2)
- 4.2. Calculate the applied manufacturing overhead cost for customer Mortein. (1)
- 4.3. Prepare the job cost card for Customer Target. (5)
- 4.4. Prepare the work in process account for Customer Doom. (5)
- 4.5. Calculate the over/under applied manufacturing overhead cost for October. (2)

QUESTION 5**20 MARKS**

Goldair Limited produces a gas heaters using 1.75 machine hours per heater. In a typical month we produces 6 000 heaters. The budgeted fixed manufacturing overheads are R136 500 per month. Manufacturing overhead costs are recovered based on units produced.

Actual information for October::

Units sold	5 200
Opening Inventory: Heaters	200
Units produced	5 900
Direct material cost per unit	R11.00
Direct labour cost per unit	R21.50
Variable manufacturing overhead cost per unit	R5.00
Total fixed manufacturing overhead cost	R128 200
Total fixed marketing cost	R120 000
Total sales value	R494 000
Sales commission paid	5% of Sales value
Packaging per unit sold	R3.20

REQUIRED:

- 5.1 Compile income statements using both the direct and absorption costing methods. Show the variable and total unit cost of the product for each of the methods. (17)
- 5.2 Reconcile the profit between the direct and the absorption costing statements. (3)