



Department of Commercial Accounting

## Cost and Financial Management 2B

CFM22B2 / CFM2BB2

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### LAST ASSESSMENT OPPORTUNITY NOVEMBER 2016

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**Time: 180 minutes**

**Marks: 100**

**Assessors:** Mrs J West      Mrs M Vermaak  
Mr RJ Rhodes      Mr D Du Plessis      Ms M Maselesele

**Moderator:** Mrs P Ramutumbu (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	Book	Marks		Time
1		Direct and Absorption costing	RED	23		41 Minutes
2		Process costing	RED	22		39 Minutes
3		Process costing	GREEN	22		39 Minutes
4		Joint and by-products	GREEN	23		41 Minutes
5		Job Costing	YELLOW	10		20 Minutes
		TOTAL		100		<u>180 Minutes</u>

**QUESTION 1****23 Marks**

Activia Limited manufactures and sells protein shakes. The company's fixed manufacturing overheads are allocated on the basis of machine hours. It takes 0.5 machine hours to produce a protein shake. The standard allocation rate for fixed manufacturing overhead cost is R15 per machine hour. The budgeted fixed manufacturing overheads amount to R42 800 and are distributed evenly throughout the month. Actual costs for January are as follows:

Direct material per unit	R3.25
Direct labour (total)	R45 363
Fixed manufacturing overheads	R50 449
Variable manufacturing overheads	R17 500
Variable administration cost (per unit)	R1.94
Variable marketing cost (per unit)	R0.98
Sales price	R23.00
Fixed administration cost	R91 000

The selling price per unit will increase with 15% in February. Direct labour and material will increase with 10% from 1 February. There were 1 800 units in the finished goods storeroom on 31 January 2016 and 14 000 units manufactured during the month. Activia Limited manufactured 20 600 units during February and sold 19 080 units in the same period. Variable administration and variable marketing costs vary with units sold. Variable manufacturing overheads change in direct proportion to change in production.

**REQUIRED:**

- 1.1 Show the flow of units for January and February. (2)
- 1.2 Calculate the total cost per unit, indicating variable and fixed cost for both months. (5)
- 1.3 Compile the Statement of comprehensive income for February 2016, using the direct costing method. (10)
- 1.4 Reconcile the difference in profit (if any) between the absorption and direct costing methods for February if net income for the Statement of comprehensive income using the absorption costing method is R159 992.20. Opening balance of inventory is R27 432. and closing balance of inventory is R52 754.80 (3)
- 1.5 What is the purpose of Direct costing? (1)
- 1.6 Explain the difference between Direct and Absorption costing. (2)

**Question 2****(22 marks)**

Lone Hill Breweries makes two products, Lone Cider and Hill Beer. The brewery uses a process costing system, accounting separately for the two product ranges. Conversion costs are incurred equally throughout the process.

The following information is available for September 2016:

	<b>Lone Cider</b>	<b>Hill Beer</b>
<b>Inventory valuation method</b>	FIFO	WAM
<b>Opening WIP</b>		
Units	10 800	10 520
Percentage complete	80%	45%
<b>Current month</b>		
Units Started	180 000	???
Units completed and transferred		???
Units Started and completed	???	189 100
Conversion cost	R558 000	R696 000
<b>Closing WIP</b>		
Units	9 500	10 900
Percentage complete	60%	30%

Lone Cider: Step 3 – Cost statement

	<b>Apple Juice</b>	<b>Yeast</b>	<b>Conversion</b>
<b>OB WIP Bought forward</b>	R19 000	R2 060	R31 320
<b>Current cost</b>	R288 000	R75 600	R561 834
<b>Total cost</b>	R307 000	R77 660	R593 154

Hill Beer: Step 3 – Cost statement

	<b>Barley</b>	<b>Hobbs</b>	<b>Conversion</b>
<b>OB WIP Bought forward</b>	R11 890	R9 150	R36 820
<b>Current cost</b>	R403 700	R290 280	R713 873
<b>Total cost</b>	R415 590	R299 430	R750 693

The production process:

### **Lone Cider**

Process 1 starts with apple juice that is added at the beginning of the process, yeast is added when the process is at 20%. At the end of process 1, the units are transferred to Process 2 for aging and bottling.

### **Hill Beer**

In process 1, barley is added, crushed and boiled, from the beginning until the process reaches 40% completion. Hops is added at 55%. The completed units are transferred to process 2, for fermentation, where yeast is added at 5%.

### **REQUIRED:**

#### **Part A – All questions are based on Lone Cider**

- 2.1 Do the timeline, clearly indicating all units and materials. (4)
- 2.2 Step 2 – Equivalent units. (4)
- 2.3 Step 4 – Cost per Equivalent unit. (4)

#### **Part B – All questions are based on Hill Beer**

- 2.4 Step 2 – Equivalent units. (3)
- 2.5 Step 4 – Cost per Equivalent unit. (4)
- 2.6 Step 5 – Cost and production statement. (3)

**QUESTION 3:****22 MARKS**

Hip hop manufacture takkies for young students. Our most successful range is the Tippy Takkies.

In the manufacturing of the Tippy's we produce the takkies in the Sewing department. Material is added at the beginning of the process. The rubber soles are sown to the top material pieces when the process is 50% complete. The shoe laces are added when the process is 85% complete. Conversion cost occur evenly throughout the process.

Inspection takes place when the process is 60% complete. A normal loss of 3% of the takkies that pass this point is detected.

At the beginning of the month we had 6 000 takkies in process that were 80 % complete. During the month 90 000 takkies were started and 89 000 takkies were transferred to packaging. At the end of the month, we had 4 000 takkies in process at 40%.

In the packaging department the Tippy's are packed in pairs into boxes which take place when the process is at 25%. At the beginning of the month we had 4 500 boxes which were 55% complete. No losses occurred in this department. At the end of the month we had 2 400 boxes which were 80% complete.

The Sewing department uses FIFO and WAM is used for the packaging department.

**REQUIRED:**

- |     |  |     |
|-----|--|-----|
| 3.1 | Give two features of a Process costing system  | (1) |
| 3.2 | Draw the timeline for the Sewing department clearly mapping the flow of units, how material is added and the total loss. | (5) |
| 3.3 | Calculate the normal and abnormal loss.  | (2) |
| 3.4 | Prepare step 2 : Equivalent units for the Sewing department  | (8) |
| 3.5 | Prepare the flow of units for the Packaging department.  | (2) |
| 3.6 | Prepare step 2: Equivalent units for the Packaging department  | (4) |

**QUESTION 4****23 MARKS**

The Soda Company Ltd produces different types of sodas. They produce two products Panta and Panta Light. Panta Light needs further processing at a total cost of R60 000. Panta and Panta Light can be sold for R8 and R12 per litre respectively. During the last month we produced 60 000 litres of Panta and 40 000 litres of Panta Light. The following joint costs were incurred during the joint production process:

**Cost**

Direct material	R125 000
Direct labour	R 75 000
Manufacturing Overheads	R100 000

The following was the state of inventory for the products:

	<b>Panta</b>	<b>Panta Light</b>
Opening Inventory	6 000 litres	1 000 litres
Closing Inventory	0 litres	4 000 litres

The company uses a FIFO inventory valuation system. All percentages must be rounded off to the nearest percentage.

**REQUIRED:**

- 4.1 What is a Joint production process? (1)
- 4.2 Allocate the joint cost to the joint products using:
  - 4.2.1 Physical units methods; (4)
  - 4.2.2 Relative Market value at split off point. (9)

*(Clearly show the total cost per product and the joint cost per unit)*
- 4.3 Calculate the total Gross Profit for Panta Light if the joint costs are allocated according to relative market value at split off point. (7)
- 4.4 How would a company account for the income generated from selling By-products? (2)

**QUESTION 5:****10 MARKS**

Cross Lakes Pty Ltd builds boat-houses for companies that hire them out for customers to spend holidays on the Vaal Dam. As the boat-houses are large and expensive, they are built to order according to the customer requirements. Before each boat-house is built, a job card is opened. All the material costs and labour is entered onto the job card. Overhead cost is allocated based on prime cost. Cross Lakes have budgeted to build 20 boats in 2016 with an average prime cost of R300 000 per boat. The annual budgeted manufacturing overhead for 2016 was R7 500 000.

Job Ngwenya was started in July and had to be finished in August.

The following information is available:

<b>Cost</b>	<b>July</b>	<b>August</b>
Direct material	R153 800	R85 000
Direct labour	R44 000	R71 200
Overheads	R247 250	???

Job Ngwenya was invoiced to the customer at the agreed price of R860 000.

**REQUIRED:**

- 5.1 Prepare the Job cost card for Job Ngwenya. (8)  
(Show all your calculations and formulas)
- 5.2 Assume the Actual manufacturing overhead cost was R 193 500, calculate the over/under applied. (1)
- 5.3 Give two features of a Job costing system. (1)