UNIVERSITY OF KWAZULU-NATAL  
SCHOOL OF ACCOUNTING, ECONOMICS AND FINANCE  
MANAGERIAL ACCOUNTING AND FINANCIAL MANAGEMENT III  
(ACCT331WY, ACCT331PY)  

28 MAY 2016  

TOTAL MARKS: 80  
DURATION: 135 MINUTES  

INTERNAL EXAMINERS:  
Staff of the School of Accounting, Economics and Finance  

EXTERNAL MODERATOR:  
Mr J Graves CA (SA)  

DO NOT TURN THIS PAGE OVER UNTIL INSTRUCTED TO DO SO  

INSTRUCTIONS TO CANDIDATES:  

1. This paper consists of TWO (2) questions. Question 1 is worth 45 marks and Question 2, 35 marks. The recommended time is 68 minutes for QUESTION 1 and 52 minutes for QUESTION 2. Reading time of 8 minutes for Question 1 and 7 minutes for Question 2 is provided.  

2. There are SIX (6) numbered pages, including this cover sheet and excluding the requirements for the question. Please check that your paper is complete.  

3. Use BOTH SIDES of the paper in the answer books. ALL answer books must be handed in, even if the question is not attempted.  

4. Complete ALL details on the front cover of ALL answer books. Ensure that your student number and the question number are LEGIBLY RECORDED.  

5. Write your answers in BLUE OR BLACK INK ONLY. Answers, including workings, submitted in pencil will not be marked.  

6. State your assumptions if deemed necessary. Ensure that you provide SUITABLE WORKINGS in support of your answers.  

7. The use of NON-PROGRAMMABLE silent calculators is permitted.
QUESTION 1 (45 marks: 68 minutes)

Construct (Pty) Ltd manufactures and markets a single product used in the construction industry. The company’s financial performance has fluctuated over the past five years but management is now confident that changes to staff in the Accounting function, including the appointment of a new financial accountant are bearing fruit and the company is expecting performance improvements. As the management accountant, management would nevertheless like your opinion on the current year’s financial results as well as plans for the forthcoming year.

The CEO is very happy with the reported profit of R1 950 000. In your meeting with him he indicated the following:

“As you can see we did not meet our budgeted sales target of 33 000 units, however we have still shown a profit of R1 950 000. The shareholders will be satisfied with our performance. Our previous Management Accountant had presented a very different scenario at the budget meeting at the beginning of the year, saying that we could make a loss if actual sales were less than budget. He presented some complicated cost-volume-profit graphs that were clearly a waste of time. He has since left the company and in my opinion we are well rid of him.”

The CEO’s comments were based on the actual profitability statements for the year ended 29 February 2016 together with management information pertaining to the statements which are presented below:

<table>
<thead>
<tr>
<th></th>
<th>R'000s</th>
<th>R'000s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (30 000 units)</td>
<td>30 000</td>
<td></td>
</tr>
<tr>
<td><strong>Production costs:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening stock</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>Raw material</td>
<td>7 500</td>
<td></td>
</tr>
<tr>
<td>Labour – variable</td>
<td>9 000</td>
<td></td>
</tr>
<tr>
<td>Production overheads</td>
<td>15 375</td>
<td></td>
</tr>
<tr>
<td>Closing stock (Finished product)</td>
<td>-6 375</td>
<td></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>25 500</td>
<td>25 500</td>
</tr>
<tr>
<td>Gross profit</td>
<td></td>
<td>4 500</td>
</tr>
<tr>
<td>Production overhead – over-recovery</td>
<td></td>
<td>1 350</td>
</tr>
<tr>
<td>Administration costs</td>
<td>-1 200</td>
<td></td>
</tr>
<tr>
<td>Selling costs</td>
<td>-2 700</td>
<td></td>
</tr>
<tr>
<td>Net Profit</td>
<td></td>
<td>1 950</td>
</tr>
</tbody>
</table>
1. At the beginning of the financial year, the management accountant presented a budget based on expected production and sales of 33,000 units. He also presented ‘what-if’ scenarios based on higher and lower sales volumes. The actual selling price achieved in 2016 was equal to the budget selling price.

2. The production overhead cost represents both fixed and variable costs. The production overhead over-recovery occurred because the new financial accountant changed the accounting system to a fully integrated costing system and actual production was 4,500 units above the budgeted production of 33,000 units. Actual variable operating costs per unit and actual fixed operating costs were as per budget.

3. Administration costs are fixed. Selling costs represent both variable and fixed costs. At the budgeted sales level of 33,000 units, the total selling costs were expected to be R2,850,000. Actual administration and selling costs were in line with budget.

In preparing the budget for the forthcoming year, the company CEO has made the following information available to you based on his expectations on operating conditions for the company in the year ahead:

1. The company is budgeting to increase the selling price by 7.5% per unit.
2. Cost structures are expected to remain unchanged.
3. Management requires a minimum fixed profit of R1,050,000 plus a variable profit of R7.40 per unit sold.

The marketing director is however concerned that the company will not be able to increase prices in the year ahead. She has become aware that a Chinese company is planning to introduce a competitor product onto the South African market in the near future, and current customers have informed her that the rival product will be launched in South Africa at a price of R950 per unit.
QUESTION 2 (35 marks: 52 minutes)

You have recently been appointed as the financial manager of ClearWater (Pty) Ltd (‘ClearWater’), a small, private boat cruise company operating out of Cape Town Harbour. In recent years, the company has experienced significant growth due to increased tourism to South Africa, particularly the Cape Town region. Despite this growth, the company has struggled to make profits in recent years. In this regard, the operations manager has noted a breakdown in relations between the boat operators and the management team. He claims that the boat operators are not providing the number of cruises that management wants and they are incurring unnecessary expenses. The boat operators, however, claim that they have no guidance from management on what they should be doing and are thus forced to operate as they see fit.

Sales budget

As the new financial manager, you have noted that the company has not as yet budgeted for the upcoming year. As a result, you have decided to begin the budgeting process and start off with the sales budget.

Currently, ClearWater operates two boat cruise routes, one being a cruise around Robben Island which lasts for four hours and the second being a cruise to the Cape of Good Hope which lasts for eight hours. While both routes have proved popular, the cruise around Robben Island has seen significantly higher growth as many tourists wish to see the island on which South Africa’s first democratic president was held prisoner. As a result of the growth in tourism and demand for the routes, the company’s operations manager is concerned that the company will not have sufficient capacity in order to meet demand. Specifically, he has noted that the company is limited, by the harbour authorities, to a total of 10 640 cruise hours per annum (a cruise hour represents how many hours the company’s boats are allowed to be sailing on the ocean). Further, as a result of a shortage of bunker fuel due to harbour mismanagement, the company has been allowed to purchase 275 000 litres of bunker fuel only for the upcoming year.
After significant research into the current tourism markets, considered with the company’s past performance and discussion with the operations manager, you have arrived at the following details of each route for the upcoming year:

<table>
<thead>
<tr>
<th></th>
<th>Robben Island</th>
<th>Cape of Good Hope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cruise demand</td>
<td>1 460 cruises</td>
<td>895 cruises</td>
</tr>
<tr>
<td>Expected passengers per cruise</td>
<td>8 people</td>
<td>8 people</td>
</tr>
<tr>
<td>Ticket price per passenger per cruise</td>
<td>R600</td>
<td>R1 000</td>
</tr>
<tr>
<td>Boat captains fees per cruise</td>
<td>R640</td>
<td>R960</td>
</tr>
<tr>
<td>Boat assistant’s fees per cruise</td>
<td>R200</td>
<td>R400</td>
</tr>
<tr>
<td>Bunker fuel usage per cruise (note 1)</td>
<td>90 litres</td>
<td>150 litres</td>
</tr>
<tr>
<td>Consumables per cruise (note 2)</td>
<td>R400</td>
<td>R740</td>
</tr>
<tr>
<td>Robben Island route commission (note 3)</td>
<td>R110</td>
<td>N/A</td>
</tr>
<tr>
<td>Allocated fixed costs per cruise (note 4)</td>
<td>R550</td>
<td>R550</td>
</tr>
</tbody>
</table>

**Note 1:** In terms of the contract with the harbour, ClearWater purchases bunker fuel at a cost of R20 per litre. ClearWater’s policy is not to hold any inventory of bunker fuel.

**Note 2:** Consumables relates to snacks provided to passengers, necessary toiletries for the voyage and other similar items.

**Note 3:** The route around Robben Island requires a special commission to be paid to the Robben Island Museum for each cruise around the island.

**Note 4:** Allocated fixed costs relate to items such as harbour rentals, boat licencing, etc. These overheads were allocated on the prior year’s actual number of 2 000 cruises. No distinction has been drawn on the length of the cruise when allocating fixed costs.

**Management meeting**

Shortly after you had prepared the budgets, you presented them at the management meeting held to discuss ClearWater’s financial position. After you had presented the budget for the upcoming year, the managing director made the following statement:
“Why are you wasting my time?? I have run this business for the last twenty years! I already know all this information you are showing me. You are completely wasting my time. I hired you to solve our financial problems, not tell me what I already know!”

The marketing manager also criticised your budgets stating the following:

“Although your budgeted numbers look reasonable given the current market circumstances, we operate in a highly volatile market. While the budget may hold true in the first few months of the year, it may not hold true for the entire year. Don’t try to convince me that you have a magical crystal ball in which you can see the future!”

**Meeting of the Board of Directors**

In addition to the management meeting, the board of directors held a strategy meeting to discuss the strategic future of ClearWater. A major concern raised was that harbour mismanagement would persist in the future resulting in further shortages of bunker fuel. Of further concern was the fact that harbour management reserved sole rights to sell bunker fuel to companies operating out of Cape Town harbour. The board has noted that they are currently operating the most fuel efficient boats available and no new technology appears to be viable for the foreseeable future. In order to prepare for this potential situation, the board is willing to compromise on their policy regarding bunker fuel.
QUESTION 1 REQUIRED:

1. Prepare a report to management explaining how the company has performed in the year to 28 February 2016 as compared to budget. Your report must be supported by:
   i. A calculation of budgeted profit and actual profit using variable costing principles.
   ii. A reconciliation of budgeted profit to actual profit calculated using variable costing principles.
   iii. A reconciliation of actual variable cost profit as calculated in (i.) in your report to the actual profit of R1 950 000 as shown in the profit statement provided to you in the management information.
   iv. An explanation of why there is a difference between the actual profit using variable costing and the actual profit as reflected in the management information.  

   (30 marks : 45 mins)

2. Prepare a budget for the forthcoming year to meet the minimum profit required as indicated by the CEO. Calculate the budgeted break-even point and margin of safety ratio. (Ignore inventory in the budget)

   (11 marks : 17 mins)

3. Calculate the required sales level and the budgeted break-even point for the company for the forthcoming year if a decision was made to match the price of the new competitor of R950, but other expectations remain the same. Discuss the potential implications for the company if it matches the competitor’s price versus if it decides to continue with plans to increase prices by 7.5%.

   (4 marks : 6 mins)
**QUESTION 2 REQUIRED**

1. Prepare the optimal sales budget for the upcoming financial year for both routes individually as well as in total.  
   **(17 marks : 25 mins)**

2. Draft a report to management in which you address the issues raised by the managing and marketing directors, specific to the situation in which ClearWater finds itself.  
   **(13 marks : 19 mins)**

3. Given the concern regarding future bunker fuel shortages and the restrictions around purchasing bunker fuel, suggest a strategy to prepare for future shortages. In light of your suggestion, prepare a detailed bunker fuel purchase budget for the upcoming financial year.  
   **(5 marks : 7 mins)**

**SHOW ALL WORKINGS**

**ROUND ALL FINAL ANSWERS TO TWO (2) DECIMAL PLACES**