

# GCE 2004

## *June Series*



# Mark Scheme

## Accounting

### *Unit ACC4*

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Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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**June 2004****ACC4****MARK SCHEME****INSTRUCTIONS TO EXAMINERS**

You should remember that your marking standards should reflect the levels of performance of candidates, mainly 17 years old, writing under examination conditions.

**Positive Marking**

You should be positive in your marking, giving credit for what is there rather than being too conscious of what is not. Do not deduct marks for irrelevant or incorrect answers as candidates penalise themselves in terms of the time they have spent.

**Mark Range**

You should use the whole mark range available in the mark scheme. Where the candidate's response to a question is such that the mark scheme permits full marks to be awarded, full marks **must** be given. A perfect answer is not required. Conversely, if the candidate's answer does not deserve credit, then no marks should be given.

**Alternative Answers / Layout**

The answers given in the mark scheme are not exhaustive and other answers may be valid. If this occurs, examiners should refer to their Team Leader for guidance. Similarly, candidates may set out their accounts in either a vertical or horizontal format. Both methods are acceptable.

**Own Figure Rule**

In cases where candidates are required to make calculations, arithmetic errors can be made so that the final or intermediate stages are incorrect. To avoid a candidate being penalised repeatedly for an initial error, candidates can be awarded marks where they have used the correct method with their own (incorrect) figures. Examiners are asked to annotate a script with **OF** where marks have been allocated on this basis. **OF** always makes the assumption that there are no extraneous items. Similarly, **OF** marks can be awarded where candidates make correct conclusions or inferences from their incorrect calculations.

**Quality of Written Communication**

Once the whole script has been marked the work of the candidate should be assessed for the Quality of Written Communication, using the criteria at the end of the mark scheme. The mark should be shown separately on the candidate's script.

1

**Total for this question: 30 marks**

Ron owns a business that manufactures kettles at a marginal cost of £18 each.

The selling price is £22.50 per kettle.

The fixed costs are currently £90 000 per annum.

**REQUIRED**

- (a) Explain the term “marginal cost”. Give an example.

**The cost of each unit of output is based in the variable costs (1), which vary in proportion to the output level when the output level changes (1) e.g. materials/labour (1)**

**3 marks**

- (b) Calculate the total contribution if 25 000 kettles are sold.

**Contribution is 22.50 (1) – 18.00 (1) = £4.50 (1)  
Total contribution £4.50 x 25 000 (1) = £112,500 (1) OF**

**5 marks**

- (c) Identify the formula used to calculate the net profit margin.

**Net profit x 100 (1)  
Turnover**

**1 mark**

- (d) Calculate the net profit margin if 25 000 kettles are sold.

<b>Total contribution</b>	<b>£112 500</b>	<b>(1) OF</b>
<b>Less fixed costs</b>	<b>(£90 000)</b>	<b>(1)</b>
<b>Net profit</b>	<b>22 500</b>	<b>(1) OF</b>
<b>Turnover 25 000 x £22.50 (1) =</b>	<b>£562 500 (1)</b>	

**Turnover =  $\frac{22\,500}{562\,500} \times 100 = 4\% (1) OF$**

**(1) process**

**7 marks**

- (e) Calculate how many **extra** kettles will need to be sold to break even, if the fixed costs increase next year by 20%.

$$\text{Current break-even} = \frac{90\,000}{4.50} = 20\,000 \text{ kettles (1)}$$

$$\text{New break-even} = \frac{90\,000 \times 1.20 \text{ (1)}}{4.50} = 24\,000 \text{ kettles (1)}$$

$$\therefore \text{extra kettles} = 4\,000 \text{ (1)}$$

**4 marks**

- (f) Calculate the selling price per kettle if the same net profit margin is required after the increase in fixed costs. (Assume that 25 000 kettles will be sold.)

$$25\,000 \times \text{SP} = \frac{\pounds 450\,000 \text{ (1)} + \pounds 108\,000 \text{ (1)}}{0.96 \text{ (1)}}$$

$$\begin{aligned} \text{SP} &= \frac{\pounds 581\,250 \text{ (1)}}{25\,000 \text{ (1)}} \\ &= \pounds 23.25 \quad \text{(1) OF} \end{aligned}$$

**max 5 marks**

- (g) Draft a memorandum addressed to Ron explaining **one** advantage and **one** disadvantage of using a graph to present a break-even point.

**MEMORANDUM**

To: }  
 From: }  
 Date: } (1)  
 Subject: }

**Advantage**

**Pictorial representation, easily understood (0-2)**

**Margin of safety can be identified and used to motivate (0-2)**

**max 2 marks**

**Disadvantage**

**May misinform due to inaccuracies (0-2)**

**One graph needed for one product only (0-2)**

**max 2 marks**

**5 marks**

2

**Total for this question: 16 marks**

The following information is available for Eurometics Ltd.

	Year ended 30 April 2003		Year ended 30 April 2004	
	£	£	£	£
Turnover		300 000		400 000
Opening stock	40 000		50 000	
Purchases	250 000		340 000	
	<u>290 000</u>		<u>390 000</u>	
Closing stock	<u>50 000</u>		<u>60 000</u>	
Cost of goods sold		<u>240 000</u>		<u>330 000</u>
Gross profit		<u>60 000</u>		<u>70 000</u>

**REQUIRED**

- (a) Calculate the rate of stock turnover for each year. State the formula used.

Formula

$$\frac{\text{Cost of goods sold}}{\text{Average stock}} \quad (1) \quad \text{Or} \quad \frac{\text{Average stock}}{\text{Cost of goods sold}} \times 365/52/12$$

**1 mark**

Rate of stock turnover, 30 April 2003

$$\frac{((40\,000 + 50\,000) \div 2) \times 365}{240\,000} \quad (1)$$

$$= 68.44 \text{ days (69 days) (1)}/9.75 \text{ weeks (1)}/2.25 \text{ months (1) or } 5.33 \text{ times per year (1)}$$

**2 marks**

Rate of stock turnover, 30 April 2004

$$\frac{((50\,000 + 60\,000) \div 2) \times 365}{330\,000} \quad (1)$$

$$= 60.83 \text{ days (61 days) (1)}/8.66 \text{ weeks (1)}/2 \text{ months (1) or } 6 \text{ times per year (1)}$$

**2 marks**

- (b) Calculate the gross profit margin for each year. State the formula used.

Formula

$$\frac{\text{Gross profit} \times 100}{\text{Turnover}} \quad (1)$$

1 mark

Gross profit margin, 30 April 2003

$$\frac{60\,000}{300\,000} \times 100 \quad (1)$$

$$= 20\% \quad (1)$$

2 marks

Gross profit margin, 30 April 2004

$$\frac{70\,000}{400\,000} \times 100 \quad (1)$$

$$= 17.5\% \quad (1)$$

2 marks

- (c) Assess the profitability of Eurometics Ltd, by comparing the performance for the years ended 30 April 2003 and 30 April 2004.

**The stock turnover period has improved (1) OF from 68.44 days to 60.83 days (1) OF. This means that stock is moving more quickly (1) OF, despite an increase in average stock (1).**

**Gross profit margin has declined (1) OF from 20% to 17.5% (1) OF. This means instead of 20p of each £1 of turnover being gross profit, it is only 17.5p (1) OF, therefore less profitable (1).**

**This would suggest that the selling price has reduced (1) or not increased in proportion to an increase in costs (1) which has enabled stock to move more quickly (1) but less profit is earned per sale (1).**

**Increase in turnover by 33 ⅓% (1), cost of sales has increased (1) and profit has increased by £10 000 (1).**

max 6 marks

3

**Total for this question: 30 marks**

Martin runs a fruit stall in a market which is open each day.

The following information is available.

	<b>May 2004 (actual)</b>	<b>June 2004 and July 2004 (Expected changes on May's figures)</b>	<b>August 2004 (Expected changes on May's figures)</b>
	<b>£</b>	<b>£</b>	<b>£</b>
Sales	5 000	an increase of 5%	an increase of 25%
Purchases	3 000	to stay the same	an increase of 15%
Delivery costs	1 000	an increase of 10%	an increase of 25%
Packaging	100	to stay the same	an increase of 20%

Each month Martin withdraws £500 for his personal use and pays £200 rent.

On 1 June 2004 Martin has £100 in the bank.

**REQUIRED**

(a) Prepare a cash budget for the three months ending 31 August 2004.

	<b>June</b>		<b>July</b>		<b>August</b>	
	<b>£</b>		<b>£</b>		<b>£</b>	
<b>Sales</b>	<b>5 250</b>	<b>(1)</b>	<b>5 250</b>		<b>6 250</b>	<b>(1)</b>
<b>Purchases</b>	<b>(3 000)</b>	<b>(1)</b>	<b>(3000)</b>		<b>(3 450)</b>	<b>(1)</b>
<b>Delivery costs</b>	<b>(1 100)</b>	<b>(1)</b>	<b>(1 100)</b>		<b>(1 250)</b>	<b>(1)</b>
<b>Packaging</b>	<b>(100)</b>	<b>(1)</b>	<b>(100)</b>		<b>(120)</b>	<b>(1)</b>
<b>Drawings</b>	<b>(500)</b>		<b>(500)</b>		<b>(500)</b>	<b>(1) row</b>
<b>Rent</b>	<b>(200)</b>		<b>(200)</b>		<b>(200)</b>	<b>(1) row</b>
<b>Net inflow</b>	<b>350</b>		<b>350</b>		<b>730</b>	
<b>Opening balance</b>	<b>100</b>		<b>450</b>		<b>800</b>	
<b>Closing balance</b>	<b>450</b>		<b>800</b>		<b>1 530</b>	<b>(1) OF process</b>

**11 marks**



On 1 September 2004 a supermarket is due to open near to the market. After this Martin expects there to be a resulting loss in his trade of 30% based on the sales for May.

Martin is considering replacing his stock with organic produce. This would increase purchase costs by 60%. He believes that, if he increases his selling prices by the same amount, he will lose many regular customers.

**REQUIRED**

- (b) Assess the financial implications for September if Martin does **not** replace his stock with organic produce.

**If no change, downturn in turnover of 30% to £3500 (1) (.70 x 5000). If costs remain the same, net cash outflow will be £574 (1) which cannot be recovered due to a proportional reduction in purchases (1).**

**Less cash will be available and profit will be reduced (1) to £74 loss, excluding depreciation (1) OF.**

**A negative net cash flow may result (1), therefore need for overdraft (1).**

**max 4 marks**

Martin proposes to change the packaging on his current produce and pass the produce off as organic. The new packaging will cost 10% more than the May prices but all other costs will remain the same as in May. The produce labelled as organic will then be sold at a 10% increase on the price in May. Martin does not expect to lose many customers this way.

- (c) Assess the financial implications for September if Martin changes the packaging and replaces his stock with produce which will be sold as if it were organic.

<b>If introduced:</b>	<b>Sales revenue</b>	<b>5 500</b>	<b>(1)</b>
	<b>Purchases</b>	<b>(3 000)</b>	<b>(1)</b>
	<b>Delivery</b>	<b>(1 000)</b>	<b>(1)</b>
	<b>Rent</b>	<b>200</b>	<b>(1)</b>
	<b>Packaging</b>	<b>(110)</b>	<b>(1)</b>
	<b>Net profit</b>	<b>1 190</b>	<b>(1) OF</b>
	<b>Drawings</b>	<b>(500)</b>	<b>(1)</b>
	<b>Net cash inflow</b>	<b>690</b>	<b>(1) OF</b>

**Positive cash flow (1).**

**Sales volume may decrease (1) but compensated by an increase in selling price (1).**

**max 6 marks**

- (d) Discuss whether Martin should introduce produce passed off as it were organic. Consider the ethical implications and make alternative recommendations.

**Judgement = (1)**

**These actions are, however, unethical (1) and if Martin is discovered, he will face prosecution (1) and possible closure (1). Customers will lose confidence (1) and the other market traders may also see a reduction in trade (1).**

**Martin should consider introducing some genuine organic produce (1) to attract new customers (1), supported by extra marketing (1), but also maintain non-organic produce to keep regular customers (1). His customers may increase anyway (1) due to the improvement in the area (1) from the added attraction of the new supermarket (1). Perhaps cheaper delivery/packaging (1) costs should be investigated (1).**

**Martin could also reduce his drawings (1), move location (1), provide a personal service/delivery (1), give offers (1).**

**max 9 marks**

## QUALITY OF WRITTEN COMMUNICATION

After the candidate's script has been marked, the work should be assessed for the Quality of Written Communication, using the following criteria.

### Marks

- 0** Accounts and financial statements are unclear and poorly presented.  
There is little or no attempt to show workings or calculations.  
Descriptions and explanations lack clarity and structure.  
There is very limited use of specialist vocabulary.  
Answers may be legible but only with difficulty.  
Errors in spelling, punctuation and grammar are such that meaning is unclear.
- 1-2** There is some attempt to present accounts and financial statements in an appropriate format.  
Workings are missing or are not clearly linked to the answers.  
Descriptions and explanations are understandable but they lack a logical structure.  
There is some use of specialist vocabulary but this is not always applied appropriately.  
In most cases answers are legible, but errors in spelling, punctuation and grammar are such that meaning may be unclear.
- 3** Accounts and financial statements are generally well presented but there are a few errors.  
Workings are shown and there is some attempt to link them to the relevant account(s).  
Descriptions and explanations are usually clearly expressed but there are some weaknesses in the logical structure. There is a good range of specialist vocabulary which is used with facility.  
Answers are legible. Spelling is generally accurate and the standard conventions of punctuation and grammar are usually followed.
- 4** Accounts and financial statements are well organised and clearly presented.  
Workings are clearly shown and easy to follow. Descriptions and explanations are clearly expressed.  
Arguments are logically structured. There is wide use of specialist vocabulary which is used relevantly and precisely.  
Answers are clearly written and legible. Spelling is accurate and the standard conventions of punctuation and grammar are followed so that meaning is clear.

