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**General Certificate of Education**

**Accounting ACC4**

**Unit 4 Introduction to Accounting for  
Management and Decision-making**

**Mark Scheme**

*2008 examination - June series*

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.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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## 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: 20 marks

Alex and Associates had the following assets and liabilities at 31 March 2008.

	£
Cash at bank	8 800 Dr
Loan (repayable 2011)	20 000 Cr
Motor vehicles	16 200 Dr
Stock	16 100 Dr
Trade creditors	12 200 Cr
Trade debtors	11 700 Dr
VAT (due to HM Revenue and Customs)	12 100 Cr

**REQUIRED**

1(a) Define the term 'working capital'.

**Working capital arises through everyday trading. (1)**

**It is calculated as the difference between current assets and current liabilities. (1)**

**2 marks**

1(b) Calculate the working capital ratio at 31 March 2008. State the formula used.

Formula

**current assets : current liabilities (1)**

**1 mark**

Calculation

**(8800 + 16 100 + 11 700)(1) : (12 200 + 12 100)(1)**

**36 600 : 24 300**

**1.51: 1 (1)OF**

**3 marks**

Unfortunately, Alex discovers that the amount recorded for cash at bank is a credit balance, being an overdraft.

**REQUIRED**

1(c) Recalculate the working capital ratio and explain the significance of the result to Alex and Associates.

Calculation

$$\begin{aligned} (16\ 100 + 11\ 700) : (12\ 200 + 12\ 100 + 8800) \\ 27\ 800 : 33\ 100 \\ 0.84 : 1 \end{aligned}$$

3 marks

Significance of result

**There are less current assets than current liabilities (1), raising concerns about the liquidity of the business (1) as there is only 84p of current assets available to pay each £1 of current liabilities (1).**

2 marks

1(d) Explain **three** possible consequences to the employees of Alex and Associates if action is not taken to improve the working capital.

Consequence 1:

**As there is no surplus cash available there may be less investment in the business, for example in new technology or equipment, or on health and safety, making the working environment less satisfactory for the employees.**

Consequence 2:

**One large bad debt may mean insufficient cash available to pay creditors and therefore lead to the company's closure, causing job losses.**

Consequence 3:

**A lack of liquid funds may lead to a reduced working week or an overtime ban. Certainly this will reduce the likelihood of a pay rise.**

1 mark for each point  
0-2 marks for development  
max 3 marks per consequence.

9 marks

2

Total for this question: 31 marks

Svetlana Omarov owns a business manufacturing drinking mugs.

The business operates over 13 four-week periods with five working days in each week.

Previously, Svetlana had fixed production at 18 000 mugs per period, regardless of the level of sales. This year Svetlana has decided to introduce a system of budgetary control.

The sales for the first four periods of this year are expected to be as follows:

	Period 1	Period 2	Period 3	Period 4
Mugs (units)	14 500	15 200	16 100	17 400

Sales are expected to occur evenly throughout each period.

Each mug costs 60p to make and is sold for £1.45.

Stock at the start of period 1 is 2900 mugs. Stock is **now** to be maintained at a level sufficient to cover 4 days of the next periods expected sales.

### REQUIRED

2(a) Prepare the production budget **in units** for each of the periods 1-3.

Production budget in units for Svetlana Omarov for Periods 1-3

	Period 1	Period 2	Period 3
	£	£	£
<b>Sales</b>	<b>14 500</b>	<b>15 200</b>	<b>16 100 (1) for row.</b>
<b>Opening stock</b>	<b>(2 900)(1)</b>	<b>(3 040)</b>	<b>(3 220)</b>
<b>Closing stock</b>	<b>3 040 (1)</b>	<b>3 220 (1)</b>	<b>3 480 (1)</b>
<b>Production</b>	<b><u>14 640 (1)OF</u></b>	<b><u>15 380 (1)OF</u></b>	<b><u>16 360 (1)OF</u></b>

**8 marks**

2(b) Calculate the total contribution for periods 1-3 based on expected sales.

**Contribution per unit 1.45 - 60p = 85p(1)**

**Total sales (45 800) (1)OF**

**Total contribution 45 800 x 85p = £38 930 (1)OF**

**3 marks**

2(c) Prepare comparative budgeted trading accounts for Svetlana Omarov for periods 1-3, using i) a fixed production level of 18 000 mugs per period and ii) the production budget for this year. Assume that stock is valued at cost.

**Budgeted Trading Accounts for Svetlana Omarov for Periods 1-3:**

- i) using a fixed production level of 18 000 mugs per period  
 ii) using the production budget for this year.

	i)		ii)	
	£	£	£	£
Sales (1.45 x 45 800)		66 410(1)		66 410(1)
Opening stock (60p x 2 900)	1 740(1)		1 740(1)	
Cost of production (54 000/ 46 380 x 60p)	32 400(1)		27 828(1)OF	
Closing stock (11 100(1)OF x 60p (1) and 3480 (1)OF x 60p (1))	(6 660)		(2 088)	
Less cost of sales		<u>27 480 (1)OF</u>		<u>27 480(1)OF</u>
Gross profit		<u>38 930 (1)OF</u>		<u>38 930(1)OF</u>

**14 marks**

2(d) Explain **two** benefits for Svetlana's business of introducing a system of budgetary control.

Benefit 1:

**Planning for the future, ie how much is to be produced which will co-ordinate other budgets and departments, e.g labour hours required and materials required for production.**

Benefit 2:

**Control of resources to reduce any unnecessary costs, which should lead to better liquidity and profitability.**

**Accept any other relevant benefits.**

**1 mark for benefit and 0-2 marks for development.**

**6 marks**

3

Total for this question: 25 marks

Eduardo runs a business which produces bottles of perfume.

Each bottle of perfume sells for £40.

For the year ending 31 December 2008, Eduardo expects the following costs per bottle of perfume:

	£
Direct materials	19
Direct labour (90 minutes paid at £6 per hour)	9
Variable manufacturing costs	5

The annual fixed costs are expected to be £390 000 per year.

Eduardo plans to achieve a weekly profit of £3000. The business operates 52 weeks a year.

**REQUIRED**

3(a) Calculate the number of bottles of perfume which Eduardo has to produce and sell per week in order to achieve the planned weekly profit. State the formula used.

Formula

**Fixed costs + profit (1)**  
**Contribution per unit**

**1 mark**

Calculation

**390 000/ 52 = 7500 (1)**

**7500 + 3000 (1) = 1500 bottles (1)OF**  
**40 (1) – (19 + 9 + 5) (1)**

**5 marks**

3(b) Calculate the profit margin which Eduardo plans to achieve each week.

**3000 (1) x 100 = 5% (1)OF**  
**(1500) (1)OF x 40 (1)**

**4 marks**

**Accept: 10 500 (1) x 100 = 17.5% (1)OF**  
**1500 (1)OF x 40**

**Or: 7(2)OF = 17.5% (1)OF**  
**40 (1)**



Following a strike of the workers at the factory, Eduardo has agreed to increase wages to £7 per hour. He has also unexpectedly had to replace one of the machines. A new machine has been leased at a monthly cost of £4550. All other costs and revenues have remained the same.

**REQUIRED**

3(c) Calculate the number of bottles of perfume which Eduardo now has to produce and sell in order to achieve the weekly profit at £3000 per week.

$$390\,000 + (4550 \times 12)(1) = \text{£}444\,600 (1) / 52 = 8550 (1)$$

$$8550 + 3000 = 11\,550 (1) \text{OF}$$

$$\frac{11\,550}{(40 - (7 \times 1.5(1) + 19 + 5))} = 5.5(1) \text{OF} \quad = 2100 \text{ bottles } (1) \text{OF}$$

**7 marks**

Eduardo wishes to increase profits from their present level. He does not believe that the market will accept an increase in the selling price and so proposes to reduce the cost per bottle by using cheaper materials which are rumoured to cause skin damage.

**REQUIRED**

3(d) Advise Eduardo of **one** possible effect of using the cheaper materials.

**Possible points:**

**Only a rumour which may prove to be unfounded (1) or if true could adversely affect the reputation (1) of the business which may lead to a reduction in sales (1) and thereby profit. (1)**

**Accept any other possible effect: 1 mark per effect and 0-3 marks for development.**

**4 marks**

3(e) Advise Eduardo of **one** possible alternative action which he could take to increase his profits from the present level.

**He could**

- **try to reduce the variable manufacturing costs per bottle;**
- **try to rent larger premises at the same cost which can store up to 2100 bottles a week but these premises may be at a less convenient location;**
- **employ part time staff so he does not have to pay for sickness and holiday costs so reducing labour costs.**

**Accept any other possible effect: 1 mark per effect and 0-3 marks for development.**

**4 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.

To help them to make judgements, examiners should focus on the following issues.

Are there clear presentations of formats and prose answers?

Are there clear and logical workings, where appropriate?

Is the whole script legible, understandable and logically argued (including spelling, punctuation and grammar)?

Is there a grasp of accounting terminology (eg avoiding slang, avoiding text language, avoiding abbreviations in prose answers)?