



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Mark scheme

June 2003

GCE

Accounting

Unit ACC4

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June 2003**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. 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: 18 marks

Newman Electronics Ltd manufactures one product which sells for £32 per unit.

The company plans to manufacture 40 000 units.

Annual costs are expected to be:

	£
variable costs	360 000
semi-variable costs of which £80 000 are fixed	280 000
other fixed costs	340 000

In the year ended 31 March 2003 46 000 units were produced and sold.

REQUIRED

(a) Define the following:

(i) fixed costs

These costs do not vary with the level of output

1 mark

(ii) variable costs

These costs vary directly with the level of output

1 mark

(iii) semi variable costs

These costs are part fixed and part variable

1 mark

(b) Calculate the expected contribution *per unit*. State the formula used.

Formula

(Selling price less variable cost) per unit = Contribution per unit

1 mark

Contribution per unit

$$\begin{array}{lcl}
 \text{VC} & = & \frac{\text{£360 000 (1)}}{40\,000 \text{ (1)}} \\
 & = & \text{£9 per unit}
 \end{array}
 \qquad
 \begin{array}{lcl}
 \text{SV} & = & \frac{\text{£280 000 (1)} - \text{£80 000 (1)}}{40\,000 \text{ (1)}} \\
 & = & \text{£5 per unit}
 \end{array}$$

Therefore, C = £32 (1) - £ (9+5)

= £18 PER UNIT (1) o/f

7 marks

(c) Prepare a statement for Newman Electronics Ltd for the year ended 31 March 2003 to show clearly the *total* contribution and the *total* profit for the year.

	£
Sales £32*46 000	1 472 000
Variable costs £9* 46 000	(414 000)
Semi-variable costs £5*46 000	(230 000)
Total contribution (1)	828 000 (2) o/f
Fixed costs	(80 000) (1)
Fixed costs	(340 000) (1)
Profit for the year (1)	408 000 (1) o/f

7 marks

2

Total for this question: 9 marks

REQUIRED

Explain **three** limitations of using break-even analysis as an aid to decision-making.

ANY THREE LIMITATIONS FROM

Presumes only one product
Presumes all output is sold
Presumes fixed costs are perfectly fixed
Presumes variable costs are perfectly variable/linear
No allowance is made for economics of scale
Presumes only one selling price
Does not consider external factors
Based on estimated figures

for each limitation
- identification (1)
- basic development (1)
- detailed development or example (1)

9 marks

3**Total for this question: 31 marks**

Lee's Landscapes Ltd supplies plants for residential gardens.

The results for the year ended 31 March 2003 are:

	£000
Sales	150
Purchases	110
Trade debtors	12
Trade creditors	11

All sales and purchases are on credit terms.

Total sales for the year ending 31 March 2004 are expected to be:

April – June	£20 000 per month
July – October	£15 000 per month
November – March	£5 000 per month

As at 31 March 2004 trade debtors and trade creditors are expected to be £14 000 and £10 000 respectively.

There is no closing stock. The profit margin is 25%.

The business prepares budgets on a two-monthly basis.

REQUIRED

(a) Prepare a purchases budget for the year ending 31 March 2004.

	April and May £000	June and July £000	August and September £000	October and November £000	December and January £000	February and March £000
Sales	40	35	30	20	10	10
Margin	(10) (1)	(8.75) (1)	(7.5) (1)	(5) (1)	(2.5)(1)	(2.5)(1)
Purchases	30 (1)o/f	26.25(1)o/f	22.5(1)o/f	15 (1)o/f	7.5(1)o/f	7.5(1)o/f

12 marks

(b) (i) Calculate the debtors' collection period for **each** of the last two years. State the formula used.

Formula

$$\frac{\text{Debtors}}{\text{Sales}} * 365 \text{ days} / 52 \text{ weeks} / 12 \text{ months} \quad (1) \quad \underline{1 \text{ mark}}$$

Year ended 31 March 2003		Year ended 31 March 2004	
$\frac{12 (1)}{150 (1)} * 365 \text{ days} = 30 \text{ days} (1)$	(29.2)	$\frac{14 (1)}{145 (1) \text{ o/f}} * 365 \text{ days} = 36 \text{ days} (1)$	$(35.24) \text{ o/f}$

6 marks

(ii) Calculate the creditors' payment period for **each** of the last two years. State the formula used.

Formula

$$\frac{\text{Creditors}}{\text{Purchases}} * 365 \text{ days} / 52 \text{ weeks} / 12 \text{ months} \quad (1) \quad \underline{1 \text{ mark}}$$

Year ended 31 March 2003		Year ended 31 March 2004	
$\frac{11 (1)}{110 (1)} * 365 \text{ days} = 37 \text{ days} (1)$	(36.5)	$\frac{10 (1)}{108.75 (1) \text{ o/f}} * 365 \text{ days} = 34 \text{ days} (1)$	$(33.56) \text{ o/f}$

6 marks

(c) Comment on the results from (b). Give **one** recommendation to improve the credit control at Lee Landscapes Ltd.

Debtors' collection period

Debtors' days increased (1) o/f
Customers take longer to pay (1) o/f

Creditors' payment period

Creditors' days decreased (1) o/f
Suppliers are paid earlier (1) o/f

Max 3 marks for comments

Recommendation

Encourage debtors to pay in cash/earlier (2) and delaying payment to creditors (2).

Max 2 marks for recommendation

5 marks

4

Total for this question: 12 marks

Sanderson Sheds Supplies has been trading for many years. The business is expected to manufacture 12 000 sheds a year. Each shed is sold for £190 and costs £140 to make.

In an attempt to reduce costs the business has changed its supplier of paint. This will save £22 per shed. The new paint is rumoured to be harmful to wildlife.

REQUIRED

- (a) Calculate the increase in total contribution which will result from the change in paint supplier.

Original contribution = $(12\ 000 \times (190-140))$ (1) £600 000 (1)

New paint = $(12\ 000 \times (190 - (140-22)))$ (1) £864 000 (1)

Increase in total contribution = £264 000 (1)

4 marks

- (b) Discuss whether Sanderson Sheds Supplies should have changed its paint supplier.

Valid point from:

Increased contribution (1) which after paying off fixed costs is profit (1)

Alternatively use some of the contribution to reduce selling price (1) and become more competitive (1)

Invest “saved” cash back into business (1) (new equipment, reward workers, etc (1))

Decrease in break-even point (1), increase in margin of safety (1)

However,

Environmental activists (1) could cause bad publicity (1)

Product may be viewed as not environmentally friendly (1) which may lose customers (1)

Potential extra costs (1) (improved waste disposal etc (1))

Paint only rumoured to be harmful (1), should be investigated more (1)

max 8 marks

5

Total for this question: 6 marks

Shine and Sparkle Ltd has 48 part-time employees who clean domestic premises. The office manager would like to introduce a system of budgetary control.

REQUIRED

Identify **two** budgets which would be useful to Shine and Sparkle Ltd and explain how each budget would benefit the company.

Cash budget (1) fees (sales) budget (1) debtors budget (1) (ANY TWO BUDGETS (1) MARK EACH) 1 mark per budget

Communication (e.g. between different managers)

Planning (e.g. staff hours needed and staff required)

Control (e.g. the movement of cash and the use of cleaning hours) plan for the future (e.g. availability of cash for future expansion)

Co-ordinate (e.g. the staff required and the amount of cash necessary for their wages)

Motivate (e.g. the workforce to achieve their budgets)

Aid to decision making (the effects of an increase in fees)

(1) per benefit } for each

(1) for development } benefit

2 marks per benefit

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.