Version 1.0

General Certificate of Education (A-level)
January 2012

Accounting ACCN4

(Specification 2120)

Unit 4: Further Aspects of Management Accounting

Final

Mark Scheme

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 events which all examiners participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for standardisation each examiner analyses a number of students' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, examiners encounter unusual answers which have not been raised 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 students' 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.

Further copies of this Mark Scheme are available from: aga.org.uk

Copyright © 2012 AQA and its licensors. All rights reserved.

Copyright
AQA retains the copyright on all its publications. However, registered centres for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to centres to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.

The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales (company number 3644723) and a registered charity (registered charity number 1073334).
Registered address: AQA, Devas Street, Manchester M15 6EX.

January 2012 **ACCN4**

MARK SCHEME

INSTRUCTIONS TO EXAMINERS

You should remember that your marking standards should reflect the levels of performance of students, 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 students 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 student'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 student'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, students may set out their accounts in either a vertical or horizontal format. Both methods are acceptable.

Own Figure Rule
In cases where students are required to make calculations, arithmetic errors can be made so that the final or intermediate stages are incorrect. To avoid a student being penalised repeatedly for an initial error, students 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 students make correct conclusions or inferences from their incorrect calculations.

Assessment Objectives (AOs)

The Assessment Objectives are common to AS and A Level. The assessment units will assess the following Assessment Objectives in the context of the content and skills set out in Section 3 (Subject Content) of the specification.

AO1: Knowledge and Understanding	Demonstrate knowledge and understanding of accounting principles, concepts and techniques.
AO2: Application	Select and apply knowledge and understanding of accounting principles, concepts and techniques to familiar and unfamiliar situations.
AO3: Analysis and Evaluation	Order, interpret and analyse accounting information in an appropriate format. Evaluate accounting information, taking into consideration internal and external factors to make reasoned judgements, decisions and recommendations, and assess alternative courses of action using an appropriate form and style of writing.
Quality of Written Communication (QWC)	In GCE specifications which require students to produce written material in English, students must: • ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear • select and use a form and style of writing appropriate to purpose and to complex subject matter • organise information clearly and coherently, using specialist vocabulary when appropriate. In this specification, QWC will be assessed in **all** units. On each paper, two of the marks for prose answers will be allocated to 'quality of written communication', and two of the marks for numerical answers will be allocated to 'quality of presentation'. The sub questions concerned will be identified on the question papers.

Task 1 **Total for this task: 8 marks**

01	*Calculate the selling price per scarf.*	*(4 marks)*

(2 100 + 1 500)/600 = £6 **(1)** marginal cost
2 400/600 = £4 **(1)** fixed cost per unit
Full cost = £10 **(1) OF**
Selling price £10 x 1.2 = £12 **(1) OF** **4 marks**

02	*Using the selling price you calculated in **0 1**, calculate the:*	
	(i) number of scarves that Keisa needs to make to break even	
	(ii) revenue at the break-even point.	*(4 marks)*

Break even is:

(i) 2 400 **(1)**/(12 – 6) **(1) OF** = 400 **(1) OF** scarves
(ii) 400 x £12 = £4 800 **(1) OF** revenue

4 marks

Task 2 **Total for this task: 30 marks**

03 *Prepare the manufacturing account for Locksum Ltd for the year ended 31 October 2011.* *(14 marks)*
(this includes 1 mark for quality of presentation)

Manufacturing account for Locksum Ltd for the year ended 31 October 2011

	£	£	
Opening inventories of raw materials		12 000	
Purchases of raw materials	64 500		
Carriage inwards	6 100*		
		70 600	
Closing inventories (stock) of raw materials		(16 000)	
Cost of raw materials consumed		66 600	**(1) OF**
Royalties		7 000	**(1)**
Direct wages **W1**		16 830	**(2) OF**
Prime cost		90 430	**(1) OF**
Indirect wages **W1**	39 270 **(1) OF**		
Factory overheads	24 200*		
Insurance **W2**	9 900 **(1)**		
Machinery depreciation	60 000 **(1)**		
Rent **W3**	11 800 **(2) OF**		
		145 170	
		235 600	
Opening work in progress	6 400		
Closing work in progress	4 200		
		2 200	**(1)**
Cost of manufacture		237 800	**(1) OF**

***(1)** for both carriage inwards and factory overheads.

W1
Wages
(84 300 + 9 200) x 60% = 56 100 **(1)**
56 100 x 30% = 16 830 **(1) OF direct**
56 100 x 70% = 39 270 **(1) OF indirect**

W2
Insurance
13 200 x 75% = 9 900 **(1)**

W3
Rent
(18 900 – 1 200 **(1)**) x 2/3 = 11 800 **(1) OF** **13 marks**
Plus 1 mark for quality of presentation

Total: 14 marks

04	*Write a report to the directors of Locksum Ltd recommending whether or not the manufacturing process should be moved to eastern Europe. Consider both the financial effects and the non-financial effects from the viewpoint of the shareholders.* *(16 marks)* *(this includes 2 marks for quality of written communication)*

To:
From:
Date
Subject

The current cost per lock is 237 800/400 000 = 59.45p per lock **(1) OF**.
If the relocation takes place then the cost per lock is reduced by 19.45p **(1) OF** each.
This is a total saving on current production levels of £77 800 per year **(1) OF** (ie £237 800 less £160 000). It would take approximately 19 years **(1) OF** to cover the initial costs of the relocation **(1)**.
Shareholders will be happy in the long run as dividend per share could rise with this saving **(1)**.

However, there is a financial cost of relocation in the short run **(1)**. How will this be financed in the short run? **(1)** If the money has to be borrowed, what is the interest payable **(1)**, which will reduce profits before dividends **(1)**, or is another issue of shares required? **(1)** which will reduce the earnings per share **(1)**. Any cost of training in Eastern Europe or increased distribution costs? **(1)** What is the cost of returns if quality is not maintained? **(1)** Cost of redundancies **(1)** cost of transport **(1)** will reduce profits.

There may be an effect on the reputation of the business if they relocate? **(1)**, especially if there are considerable redundancies and the factory is not sold as a going concern **(1)**. This may reduce the market value of the shares **(1)**. Can the quality of the locks be assured **(1)** or the quality of the workforce? **(1)** Possibility of transport delay/reliability **(1)** language barriers **(1)** eastern European legislation **(1)**.

Overall maximum for financial and non-financial factors: 12 marks

Recommendation
Clear recommendation **(1)** with justification **(1)**. **Max 2 marks for recommendation**
Overall Max 14 marks

Quality of written communication (QWC) awarded for well structured prose responses and accurate spelling punctuation and grammar:

- for **2 marks**: The student must have no more than 3 spelling, punctuation or grammar errors and have provided suitable report headings (to, from, date and subject)
- for **1 mark**: The student will have 4 or more spelling, punctuation or grammar errors, but the meaning is clear and some attempt at using report headings
- for **0 marks**: The student response is limited and/or difficult to understand
- a repeated spelling punctuation or grammar error only counts as one mistake. **2 marks**

Total: 16 marks

Task 3 **Total for this task: 31 marks**

05 *Calculate the net present value of the new machine.* *(18 marks)*

Year	Net cash flow		Discount factor	Present value	
	£			**£**	
0	(300 000)	**W1**	1	(300 000.00)	**(1)**
1	90 000		0.926	83 340.00	**(1) OF**
2	116 400		0.857	99 754.80	**(1) OF**
3	147 080		0.794	116 781.52	**(1) OF**
			Net present value	(123.68)	**(1) OF**

Variable costs (0.25 x 16) + (0.5 x 28) = 18 **(2) CF**

Contribution 40 – 18 = 22 (**1) CF**

W1
Net cash flows
Year 1 (6 000 **(1)** x 22) = 132 000 – (2 000) **(1)** = 130 000 **–** 40 000* = 90 000 **(1) OF**
Year 2 (7 200 **(1)** x 22) = 158 400 – (2 000) **(1)** = 156 400 – 40 000* = 116 400 **(1) OF**
Year 3 (8 640 **(1)** x 22) = 190 080 – (3 000) **(1)** = 187 080 – 40 000*= 147 080 **(1) OF**
*1 mark for deducting fixed costs £40 000 in each calculation

18 marks

06 *Calculate the following sub-variances:*

(i) direct material price variance
(ii) direct material usage variance
(iii) direct labour rate variance
(iv) direct labour efficiency variance. *(8 marks)*

(i) Material price variance 2 600 (16 – 12) = £10 400 **(1)** favourable **(1)**
(ii) Material usage variance 16 (2 600 – 1 550) = £16 800 **(1)** adverse **(1)**
(iii) Labour rate variance 3 000 (28 – 20) = £24 000 **(1)** favourable **(1)**
(iv) Labour efficiency variance 28 (3 100 – 3 000) = £2 800 **(1)** favourable **(1)** **8 marks**

07 *Explain:*

(i) ***two*** *possible reasons for the labour efficiency variance*

(ii) *the effect of the labour efficiency variance on the budgeted profit for the first year.* *(5 marks)*

(i) The variance arose because the staff were more highly motivated **(1)** due to improved management and better working conditions **(1)**.
Productivity improvements due to training and development of the workforce **(1)**.
This may be because of better machinery so the workforce could be more efficient **(1)**.

(ii) The labour efficiency variance will increase profit **(1) OF**.

5 marks

Task 4 **Total for this task: 21 marks**

08 *Calculate the contribution per labour hour for **each** jacket.* *(6 marks)*

	Leather		Sports		Flak	
	£		£		£	
Selling price	114		98		72	
Variable cost	54		48		30	
Contribution	60	**(1)**	50	**(1)**	42	**(1)**
Labour hours	1.5		2		1	
Contribution per labour hour	40	**(1) OF**	25	**(1) OF**	42	**(1) OF**

6 marks

09 *Calculate the optimum production plan which Calvin Clobber Ltd could introduce that, given the limited number of labour hours available, would maximise profit.* *(4 marks)*

Optimum production plan
Max production of Flak first, then Leather and then Sports.

	Units	Hours
Flak	9 000 **(2)**	9 000
Leather	16 000 **(2)**	24 000

4 marks

10 *Explain briefly the limitations of the production plan calculated in **0 9**.* *(4 marks)*

There is no production of the Sports style of jacket **(1) OF** and demand for the Leather style is not fully satisfied **(1) OF**.
Customers may therefore be lost to competitors **(1)** and market share may be reduced **(1)**.
The Sports style may be unique to Calvin Clobber Ltd **(1)**.
The demand for the other styles may depend on the purchase of the Sports style **(1)** so they may lose customers **(1)**.
Tastes may change **(1)** so demand changes.
All information is estimated **(1)** so may be inaccurate.

Max 4 marks

11 *Prepare an extract from the labour budget for each of the periods 10–13, showing the maximum number of employees and the total hours worked per period.(7 marks)*
(this includes 1 mark for quality of presentation)

Extract from Labour budget for periods 10–13 for Calvin Clobber Ltd

QWC 1 for the three elements	Period		**10**	**11**	**12**	**13**	
	Staff	W1	15	15	15	15	**(1) OF** row
	Hours	**(1)** (40 x 4 x 15)	2 400	3 000	3 000	3 000	**(1) OF** (50 x 4 x 15)

Workings

W1
Hours per year per employee
40 x 4 x 10 periods **(1)** + 50 x 4 x 3 periods **(1)** = 2 200 **(1) OF**
ie 1 600 **(1)** + 600 **(1)** = 2 200 **(1) OF**

Maximum number of employee with hours available
33 000/2 200 = 15

6 marks

Quality of presentation
1 mark for layout of budget showing number of staff, periods of time and total hours.

1 mark

Total 7 marks