A-LEVEL
Accounting

ACCN4 Further Aspects of Management Accounting
Mark scheme

2120
June 2016

Version 1.0: Final Mark Scheme

Mark schemes are prepared by the Lead Assessment Writer 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 associates 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 associate understands and applies it in the same correct way. As preparation for standardisation each associate 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, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

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 aqa.org.uk.

1 (a) *Prepare the manufacturing account for Allam Limited for the year ended 31 March 2016.*

[13 marks]
[includes 2 marks for quality of presentation]

Allam Limited. Manufacturing account for the year ended 31 March 2016

	£000		£000	
Cost of raw materials used				
Opening inventory	53			
Purchases	251			
Closing inventory	(62)		242	**(1)**
Direct wages			112	**(1)**
Prime cost **(1 QoP)**			354	**(1of)**
Factory overheads				
General expenses	105	**(1)**		
Premises rental (125 + 9 – 14) x 80%	96	**(1)**		
Factory supervisors' wages	29	**(1)**		
Depreciation – factory machinery (106 – 90)	16	**(1)**		
Depreciation – loose tools (14-12)	2	**(1)**	248	
			602	
Opening work in progress	19			
Closing work in progress	(26)		(7)	**(1)**
Factory cost of production **(1 QoP)**			595	**(1of)**
Add: factory profit (20%)			119	
Transfer price			714	**(1of)**

Marker notes:
Show each individual mark Each figure must have an appropriate label.
There is a quality mark for prime cost label – do not accept any alternative label
No mark for prime cost figure OR factory cost of production if alien item in the section..
If manufacturing account begins with sales, the prime cost figure will not be awarded.
If total overheads is deducted rather than added, student will lose the factory cost of production figure 595 (of).
Second quality mark for label factory cost of production: accept alternatives that refer to both 'cost' and 'production'.
The mark for transfer price should have an appropriate label and must be after the addition of factory profit. The factory profit must be 20% of the student's factory cost of production.

1 (b) *Calculate the amount to be shown in the balance sheet for the provision for unrealised profit at 31 March 2016.*

[3 marks]

£30 000 **(1)** x (20/120) **(1)** = £5000 **(1)**

2 (a) (i) *Cost pool.*

[2marks]

Definition (1)
The location of a group of related indirect costs/Group of overheads which are incurred due to the same activity/
Development (1)
The idea that costs are gathered first and then allocated out
Marker note:
For the definition the key words are group, cost centre, gathering of costs

2 (a) (ii) *Cost driver.*

[2marks]

A factor that causes **(1)** or influences the level of cost **(1).**

2 (b) *State **one** example of a cost pool for CH Products and an associated cost driver.*

[2 marks]

Cost pool – eg machining **(1)** maintenance **(1)** canteen **(1)**(or any appropriate area of business)
Driver – eg machine hours **(1)** no of job requests **(1)** number of employees **(1)** (or any appropriate related driver)
Only allow mark for driver if correct pool is stated

2 (c) *State **three** advantages of operating a system of activity based costing*

[3 marks]

Improved accuracy **(1)** more objective leading to more accurate costs and more accurate selling prices
Improved decision-making **(1)** provides managers with better idea of what causes changes in costs
Greater relevance **(1)** is less arbitrary, does not use irrelevant costs
Wider application **(1)** can be applied to service and manufacturing sectors

Marker note:
More precise, more refined – accept these as the idea of more accurate.
Accept more accurate but not just "it is accurate"
Do not accept it is cheaper

Max 3 marks

2 (d) *Referring to the above chart, identify the correct reference for each of the following. (Tick **one** option only in each part)*

[3 marks]

2 (d) (i) *Total cost.*

[1 mark]

	✓
Point A to Point G	✓
Point A to Point H	
Point B to Point F	

2 (d) (ii) *Profit at an output of 6000 units.*

[1 mark]

	✓
Point A to Point G	
Point F to Point G	✓
Point G to Point H	

2 (d) (iii) *Margin of safety at an output of 6000 units.*

[1 mark]

	✓
Point A to Point E	
Point A to Point H	
Point E to Point H	✓

3 (a) *Calculate the budgeted contribution and the budgeted profit for March 2016.*
[5 marks]

		£	£	
Sales	1850 x £55		101 750	**(1)**
Direct materials	1850 x £27	49 950		
Direct labour	1850 x £12.60	23 310	73 260	**(1)**
Contribution			28 490	**(1of)**
Fixed costs			(9 000)	**(1)**
Profit			19 490	**(1of)**

Marker note:
Students who just show 'contribution 28 490' and 'profit 19 490' should be awarded 5 marks.
Students who just show 'profit 19490' would be awarded 4 marks
Students who produce an answer for a whole year: give 1 mark for a correct contribution figure of 341880, and 1 mark for a correct profit of 233880 (must be labelled).
Student who uses a per unit approach, reward as per the mark scheme, but award 1 mark if student identifies correct contribution per unit of £15.40..
Regard inventory as an alien item.

3 (b) *Calculate the actual contribution and the actual profit for March 2016.*
[5 marks]

		£	£	
Sales	1900 x £57		108 300	**(1)**
Direct materials		57 057		
Direct labour		26 296	83 353	**(1)**
Contribution			24 947	**(1)**
Fixed costs			(9 000)	**(1)**
Profit			15 947	**(1of)**

Marker notes:
Students who just show 'contribution 24 947' and 'profit 15 947' award **5** marks.

3 (c) *Calculate the sub-variances for direct materials and direct labour for March 2016.* ***[8 marks]***

Direct material price variance

29 260m should cost (£1.80)	52 668		
Actually cost	57 057		
	4 389	**(1)** Adverse	**(1)**

Direct material usage variance

1900 beds should use (15m)	28 500m		
Actually used	29 260m		
	760m		
	X £1.80		
	1 368	**(1)** Adverse	**(1)**

Direct labour rate variance

3040 hrs should cost (£8.40)	25 536		
Actually cost	26 296		
	760	**(1)** Adverse	**(1)**

Direct labour efficiency variance

1900 beds should take (1.5 hrs)	2850 hrs		
Actually took	3040 hrs		
	190 hrs	A	
	X £8.40		
	1 596	**(1)** Adverse	**(1)**

Accept: Adv, A in place of adverse; but do not accept a negative or brackets in place of adverse; do not accept unfavourable.

3 (d) *Calculate the sales price variance for March 2016.* ***[3 marks]***

Sales price variance

£3 800 (**2**) Favourable **(1)**
£3 700 **(1**) Favourable (**1)**

Marker note:
Accept: Fav, F in place of favourable, but do not accept plus sign/no sign. **Do not** accept Favourable with incorrect figure

3 (e) *Complete the following table to reconcile the budgeted profit for March 2016 with the actual profit.*

[7 marks]

Budgeted profit (from task 3a)				19 490	**(1of)**
Sales volume additional contribution	770	Fav			
Sales price variance	3 800	Fav	**(1of)**		
Direct material price variance	4 389	Adv	(1of)		
Direct material usage variance	1 368	Adv	(1of)		
Direct labour rate variance	760	Adv	(1of)		
Direct labour efficiency variance	1 596	Adv	(1of)		
Actual profit (from task 3b)				1 5 947	**(1of)**

Marker note
Mark figures for variances from 3 c **only** and ignore the description of the variances as adverse or favourable.

3 (f) *State **four** benefits of maintaining a system of standard costing.*

[4 marks]

(Max 4, max 1 mark each)

- Minimizes wastage by detecting variances allowing corrective action to be taken **(1).**
- Provides a yardstick for performance evaluation **(1)**
- Facilitates responsibility accounting **(1)**
- Provides the basis for incentive schemes (motivation) **(1)**
- Encourages reappraisal of systems and methods **(1)**
- Acts as an effective tool for business planning / budgeting **(1)**
- Draws management attention to areas not performing as to plan **(1)**
- Simplifies cost control procedures **(1)**

Marker note:

Award marks only where the student's statement has a clear focus and is not too generalised.

4 (a) *Calculate the net cash savings of purchasing the machinery for each year and in total, if the directors decide to manufacture the units rather than buy in the units.*
[6 marks]

Year	Buy in	Direct materials	Wages	Maint.	Other	Total costs	Saving	Alternative Saving*
1	250 000	90 000	65 000	10 000	30 000	195 000	55 000 **(1)**	25 000 **(0)**
2	275 000	105 000	70 000	12 000	35 000	222 000	53 000 **(1)**	23 000 (**1**)
3	302 500	120 000	76 000	15 000	40 000	251 000	51 500 **(1)**	21 500 **(1)**
4	332 750	138 000	82 000	20 000	45 000	285 000	47 750 **(1)**	17 750 **(1)**
5	366 025	155 000	90 000	25 000	50 000	320 000	46 025 **(1)**	16 025 **(1)**
						Net saving	253 275 **(1)**	103 275 **(1)**

Marker Note:
*Students who fail to deduct depreciation from expenses will achieve these alternative savings figures:
The final figure need not be labelled.

4 (b) *Calculate the payback period of the machinery.*
[2 marks]

Year	Net cash flow	Cumulative
1	55 000	55 000
2	53 000	108 000
3	51 500	159 500
4	47 750	207 250

Payback = 3 yrs **(1)** + **(**20 500 / 47 750) = 0.43 yrs **(1)** (or 3 years 157 days)

OR

Award **1** mark for identifying £180 000 outlay; Award **1** mark for a time period based on own figures

4 (c) *Calculate the net present value of the machinery. The discount factors for 12% are as follows:*

Year	Discount factor
1	0.893
2	0.797
3	0.712
4	0.636
5	0.567

[7 marks]

Year	Cash flow*	Disc Factor	PV	
0	(180 000)	1	(180 000)	**(1)**
1	55 000	0.893	49 115	**(1of)**
2	53 000	0.797	42 241	**(1of)**
3	51 500	0.712	36 668	**(1of)**
4	47 750	0.636	30 369	**(1of)**
5	76 025	0.567	43 106	**(1of)**
	Net present value		21 499	**(1of)** ***must be labelled***

*Cash flows must come from 4 (a)

Accept NPV for label

4 (d) *Advise the directors whether they should invest in the machinery and relocate the business or whether they should continue to buy in the units. Consider both financial and non-financial issues and give reasons for your advice.*

[15 marks]

[includes 2 marks for quality of written communication]

Financial (max 8 marks)

Identification (1 mark)	**Development (1 mark)**
Rent*	Relocation: saving of £90 000 If they stay: additional cost of £60 000 Impact on profit of additional rent payment
Positive (or OF negative) net present value*	Acceptable with figure quoted (or OF negative, not acceptable)
Payback	Own figures
Increased cash flow*	Own figures
Delivery costs	Potential extra delivery costs if relocate
Financing the purchase	Can they afford repayments, can they afford, the interest payments, effect on gearing. Award for any relevant cost figures provided.
Capital appraisal methods	Are only estimates so may not be accurate
Redundancy costs	Possible redundancies if they relocate leading to redundancy costs
Relocation costs	Cost of moving machinery etc; disruption of production
Training	If relocation cost of retraining existing staff on new machinery, or new staff on machinery
Increase in buy-in costs	Escalating buy-in costs, may not be able to pass on to customers, impact on profits
Loss of current market	Will local customers still trade if relocate

Non-financial (max 8 marks)

Identification (1 mark)	**Development (1 mark)**
Environmental issues	Impact on the village, noise pollution, air pollution, travel congestion because of deliveries, customer visits, etc if relocation
Reputation of business	Award reference to loss of sales due to pollution etc
Impact on current staff	Will they wish to travel, willingness to retrain, motivational issues
Labour shortages	Will right skills be available in the neighbourhood, will existing employees continue to work if relocation
Quality control	By manufacturing their own goods the quality may improve as they can monitor it more closely
Positive non-financial factors	More local employment opportunities; benefits to existing trade from additional visitors (employees, customers) benefiting the reputation of the company

Advice (1) plus justification (1)

Overall maximum: financial + non-financial + advice: 13 marks

Quality of written communication (2)

2 marks: no more than 3 spelling, punctuation and grammatical errors and technical language used appropriately.
1 mark: More than 3 spelling, punctuation and grammatical errors.
0 marks: where written work hinders understanding.