OXFORD AQA
INTERNATIONAL QUALIFICATIONS

INTERNATIONAL A-LEVEL
ACCOUNTING
9615/4

Paper 4 Accounting for analysis and decision making

Mark scheme

Specimen

Version: 1.0 Final

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 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 oxfordaqaexams.org.uk.

Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

The own figure rule

General principle

The own figure rule is designed to ensure that students are only penalised once for a particular error at the point at which that error is made, and suffer no further penalty as consequence of the error. The error could be in an account, a calculation, financial statement, or prose explanation. Where the own figure rule is to be applied in a mark scheme, the symbol **OF** is used.

Applications

In an account: a student could still achieve a mark for balancing an account with their own figure, rather than the correct figure, if they had made an error in the account (such as the omission of an entry, or the inclusion of an incorrect figure for an otherwise valid entry). However, it should be noted that an own figure would not be awarded for the balance of an account, if the account contained any item which should not have appeared (often referred to as an 'extraneous/alien' item).

In a complex calculation to which several marks are allocated: a student could achieve an own figure mark for the result of a complex calculation, if an error has been made in one of the steps leading to the final result. The complex calculation could be a separate task, or an aspect of a larger requirement (such as workings to provide details for a financial statement).

In a financial statement: a student could still achieve a mark for calculating an own figure for a key subtotal within a financial statement where an error had already occurred in the data making up the subsection (such as the omission of an item, or an incorrect figure for an otherwise valid entry). Again, the own figure for a subtotal would not be given if the subsection included any 'alien' item.

In a prose statement: a student who is explaining or interpreting some financial statements or data that they have prepared but which contains errors, would be credited with an appropriate interpretation of their own figures.

Workings

A '**W**' next to a figure in the mark schemes means that the figure needs to be calculated by the student to which workings are shown for reference. If the figure the student has given in their answer is wrong and the marks given for that calculation are more than 1 then the marker must refer to the working for that item. The working will show the steps of the calculation to which the marks are attributed and the student should be allocated the marks for the steps they completed correctly.

Section A

Question	Answer	Total marks
01	**D** **Budgeted overheads** **Budgeted activity**	**1** **AO1 = 1**

Question	Answer	Total marks
02	**B** **Labour efficiency and material usage**	**1** **AO1 = 1**

Question	Answer	Total marks
03	**D** **2 years 122 days**	**1** **AO1 = 1**

Question	Answer	Total marks
04	**C** **The planned unit cost of a product produced in a period of time**	**1** **AO1 = 1**

Question	Answer	Total marks
05	**B** **The product with the highest contribution per labour hour**	**1** **AO1 = 1**

Question	Answer	Total marks
06	**D** **Subjectivity**	**1** **AO1 = 1**

Question	Answer	Total marks
07	**D** **Ordinary shares**	**1** **AO1 = 1**

Question	Answer	Total marks
08	**C** **Sales + closing inventory – opening inventory**	**1** **AO1 = 1**

Question	Answer	Total marks
09	**C** **Produced within a regulatory framework**	**1** **AO1 = 1**

Question	Answer	Total marks
10	**C** **Indirect and stepped fixed**	**1** **AO1 = 1**

Question	Part	Marking guidance	Total marks

11		Calculate the number of units that would have to be produced and sold to achieve a target profit of £21 750.
		
		Fixed costs + Target profit
		   Contribution per unit
		
		£147 000 **(1)** + £21 750 **(1)** = 75 000 **(1) OF**
		   £2.25 **(2) OF W1**
		
		W1 Contribution
		
		Selling price - Variable costs
		£11.25 **(1)** – £9.00 **(1)** = £2.25 **OF**
			5
			
			AO1 = 5

Question	Part	Marking guidance	Total marks
12		Calculate the net present value for the machine. Show all values rounded to the nearest whole pound.	8
			AO1 = 8

Year	Net cash flow £		Discount factor	DCF £
0	(194 675) **(1)**		1.000	(194 675) **(1)***
1	75 000		0.893	66 975
2	78 500	4 (W1)	0.797	62 565
3	82 350		0.712	58 633
4	86 585		0.636	55 068
4	34 675 **(1)**		0.636	22 053
NPV				70 619 **(1) OF**

***1 mark allocated for the correct application of the discount factor for all years**

Workings:

W1: Net cash flow

	Year 1 £	Year 2 £	Year 3 £	Year 4 £	Marks
Profit	35 000	38 500	42 350	46 585	1
Depreciation	40 000	40 000	40 000	40 000	2 OF (W2)
Cashflows	75 000	78 500	82 350	86 585	1 OF

W2: Depreciation

Depreciation: (£194 675 –£ 34 675) = £160 000 **(1)** / 4 = £40 000 **1 OF**

Marker notes:

Accept reasonable rounding for present values.

1 mark for NPV is only awarded if all present values are correctly totalled.

The cash flows for year 4 can be combined.

1 mark can be awarded for correct calculation of depreciation if not used in calculation of net cash flow.

Section B

Question	Part	Marking guidance	Total marks
13	1	Calculate the following variances. **Material price variance:** 202 500 **(W1)** x (£7.25 **(W2)** – £9.45) = £445 500 **(1)** Adverse **(1)** **(W1)** 30 000 x 6.75 = 202 500 **(W2)** £1 972 000 / (32 000 x 8.5) = £7.25 Alternative: <table><tr><td>Standard</td><td>Actual</td><td>Variance</td></tr><tr><td>AQ X SP</td><td>AQ X AP</td><td></td></tr><tr><td>202 500 x £7.25</td><td>202 500 x £9.45</td><td></td></tr><tr><td>£1 468 125</td><td>£1 913 625</td><td>£445 500 **(1)** A **(1)**</td></tr></table> **Material usage variance:** £7.25 x (255 000 **(1)** **(W1)** – 202 500) = £380 625 **(1)** Favourable **(1)** **(W1)** 30 000 x 8.5 = 255 000 Alternative: <table><tr><td>Standard</td><td>Actual</td><td>Variance</td></tr><tr><td>SQ X SP</td><td>AQ X SP</td><td></td></tr><tr><td>255 000 **(1)** x £7.25</td><td>202 500 x £7.25</td><td></td></tr><tr><td>£1 848 750</td><td>£1 468 125</td><td>£380 625 **(1)** F **(1)**</td></tr></table>	10 AO2 = 10

Labour rate variance:

105 000 **(W1)** x (£14.00 **(W2)** – £13.00) = £105 000 **(1)** Adverse **(1)**

(W1) 30 000 x 3.5 = 105 000

(W2) £1 872 000 / (32 000 x 4.5) = £13.00

Alternative:

Standard	Actual	Variance
AH X SR	AH X AR	
105 000 x £13	105 000 x £14	
£1 365 000	£1 470 000	£105 000 **(1)** A **(1)**

Labour efficiency variance:

£13.00 x (135 000 **(1)** **(W1)** – 105 000) = £390 000 **(1)** Favourable **(1)**

(W1) 30 000 x 4.5 = 135 000

Alternative:

Standard	Actual	Variance
SH X SR	AH X SR	
135 000 **(1)** x £13	105 000 x £13	
£1 755 000	£1 365 000	£390 000 **(1)** F **(1)**

Marker notes:
For material price and labour rate, the variance must be adverse to be awarded the **1 mark** and attached to a figure and workings shown.

For material usage and labour efficiency, the variance must be favourable to be awarded the **1 mark** and attached to a figure and workings shown.

Accept reasonable alternative or abbreviated labels for variances instead of adverse or favourable.

Question	Part	Marking guidance	Total marks
13	2	Prepare a reconciliation of budgeted cost to actual cost.	5
			AO2 = 5

	£	
Budgeted cost	3 603 750	**2OF W1**
Material price variance	445 500	**1OF both**
Material usage variance	(380 625)	
Labour rate variance	105 000	**1OF both**
Labour efficiency variance	(390 000)	
Actual cost	3 383 625	**1 W2**

Workings:

W1 Budgeted cost: (£1 848 750 **(1)OF** + £1 755 000 **(1)**)**OF** = £3 603 750 **OF**

W2 Actual cost: (£1 470 000 + £1 913 625) = £3 383 625 **(1)**

Marker notes:

The direction of the variances must be clearly shown (added or deducted). It is NOT sufficient to just show favourable or adverse unless the budgeted and actual costs are the correct figures.

Question	Part	Marking guidance	Total marks
14	1	Prepare statements to show revenue, contribution and profit or loss per week for each type of product, X and Y.	14 AO2 = 14

	X		Y	
	£		£	
Revenue	137 250	**2 W3**	140 400	**2 W3**
Materials	(33 750)		(22 750)	
Labour	(42 500)		(55 250)	
Contribution	61 000		62 400	**1*OF**
Machinery preparation	(28 800)	**2 W1**	(15 360)	**2 W1**
Quality control procedures	(37 950)	**2 W2**	(30 360)	**2 W2**
Profit or loss	(5 750)		16 680	**1*OF**

(W1) Machinery preparation:
Number of batches per week:
X: 4 500/50 = 90   Y: 3 600/75 = 48
Total batches = 90 + 48 = 138

X: (£44 160/138) x 90 **(1)** = £28 800 **(1)**
Y: (£44 160/138) x 48 **(1)** = £15 360 **(1)**

(W2) Quality control procedures:
Number of inspections per week:
X: 4 500/300 = 15   Y: 3 600/300 = 12
Total batches = 15 + 12 = 27

X: (£68 310/27) x 15 **(1)** = £37 950 **(1)**
Y: (£68 310/27) x 12 **(1)** = £30 360 **(1)**

(W3) Revenue:
X: £33 750 + £42 500 =£76 250 **(1)** x 1.8 = £137 250 **(1) OF**
Y: £22 750 + £55 250 = £78 000 **(1)** x 1.8 = £140 400 **(1) OF**

* Award 1 mark for both figures

Marker note:
A mark for revenue, contribution and profit or loss will only be awarded if they are labelled correctly.

Question	Part	Marking guidance	Total marks
14	**2**	Advise the directors of Ekin plc whether they should change back to absorption costing**.**	**6** **AO2 = 2** **AO3 = 4**

Level	Marks	Description
3	5 - 6	• Relevant knowledge and understanding of principles, concepts and techniques has been applied to the context clearly and appropriately. • A clear and balanced analysis of data is provided. The judgement/ recommendation is supported by evidence.
2	3 - 4	• Relevant knowledge and understanding of principles, concepts and techniques has been applied to the context, but not always clearly and/or appropriately. • A clear but unbalanced OR a balanced but unclear analysis of data is provided. The judgement/ recommendation is partially supported by evidence.
1	1 - 2	• Limited application of knowledge and understanding of principles, concepts and techniques to the context. • A limited analysis of discrete points of accounting data is provided. There is limited support for the judgement/ recommendation.

Answers may include:

Benefits of staying with ABC (drawbacks of converting back to absorption):

Loss-making product has been identified (X making a loss of £5 750 OF). Corrective action could be taken to improve product profitability.

Business is still making a profit overall (£10 930 OF).

Areas of waste or inefficiency can be better identified (relating to machinery preparation and quality control procedures).

Fixed costs are assigned to product based on usage (per batch) and not an arbitrary allocation. But: cost drivers and cost pools are expensive to set up and maintain.

		Marker notes:	
		• Not all content needs to be covered to gain full marks.	
		• The indicative content is not exhaustive other credit worthy material should be awarded marks as appropriate.	

Question	Part	Marking guidance	Total marks
15	1	Prepare a cash budget for Webster for the month of January.	14

AO2 = 14

	£	
Receipts:		
Cash sales	14 550	**2OF W1**
Credit customers -1 month	33 000	**1 W2**
Credit customers -2 months	7 200	**1 W3**
Total receipts	54 750	
Payments:		
Cash purchases	18 000	**1 W4**
Credit suppliers	15 000	**1 W5**
Wages	6 150	**1 W6**
Loan	750	**1 W7**
Loan interest	75	**1 W8**
Expenses	14 200	**2OF W9**
Drawings	4 800	**1 W10**
Total payments	58 975	
Opening balance	1 250	
Net cash in/out flow	(4225)	**1OF**
Closing balance	(2 975)	**1OF**

W1: (£60 000 x 25% **(1)**) x 97% **(1)** = £14 550 **(OF)**

		W2: £55 000 x 60% = £33 000 **(1)**		
		W3: £48 000 x 15% = £7 200 **(1)**		
		W4: £36 000 x 50% = £18 000 **(1)**		
		W5: £30 000 x 50% = £15 000 **(1)**		
		W6: £6 000 x 1.025 = £6 150 **(1)**		
		W7: £45 000/60 = £750 **(1)**		
		W8: (£18 000 x 5%) x 1/12 = £75 **(1)**		
		W9: £48 000 x 20% x 1/12 = £800		
		£15 000 **(1)** – £800 **(1)** = £14 200 **(OF)**		
		W10: £60 000 x 8% = £4 800 **(1)**		
		Marker note: OF for net cash in/outflow will only be awarded if there are no extraneous items in the cash budget.		

Question	Part	Marking guidance	Total marks
15	**2**	The cash balance for Webster has been declining in recent months. Webster is considering whether to delay paying his suppliers to improve cash flow. Assess whether this would be the most appropriate way to improve the cash flow of Webster's business.	**6** **AO2 = 2** **AO3 = 4**

Level	Marks	Description
3	5 - 6	• Relevant knowledge and understanding of principles, concepts and techniques has been applied to the context clearly and appropriately. • A clear and balanced analysis of data is provided. The judgement/ recommendation is supported by evidence.
2	3 - 4	• Relevant knowledge and understanding of principles, concepts and techniques has been applied to the context, but not always clearly and/or appropriately. • A clear but unbalanced OR a balanced but unclear analysis of data is provided. The judgement/ recommendation is partially supported by evidence.
1	1 - 2	• Limited application of knowledge and understanding of principles, concepts and techniques to the context. • A limited analysis of discrete points of accounting data is provided. There is limited support for the judgement/ recommendation.

Answers may include:

Delaying paying suppliers:
No cash discount would be lost by paying for all purchases on a credit basis (no prompt payment discount appears to exist).

Suppliers may be dissatisfied about delaying paying for all purchases and so may stop supply or charge interest for late payment beyond credit period (eg 30-day term). Could impact on reputation and ability to find alternative suppliers.

Alternative ways to improve cash flow:
Try and get more customers to pay on cash terms – 75% are on credit currently. However, more cash inflows would be lost via the 3% discount for prompt payment.

Not pay the 2.5% wage increase but this may lead to employee dissatisfaction.

Owner take less cash drawings than the current 8% of sales.

Business could review other expenses to see if any could be cut to reduce cash outflows.

Section C

Question	Part	Marking guidance	Total marks
16		Assess whether the directors should purchase the robotic machinery. Consider **both** financial and non-financial factors.	**12** AO2 = 3 AO3 = 9

Level	Marks	Description
4	10-12	An excellent response that focuses fully on the demands of the question. • A wide range of relevant knowledge and understanding of accounting principles, concepts and techniques is applied to the context clearly and appropriately. • Accounting data is analysed and evaluated thoroughly to make a balanced, well-reasoned and persuasive judgement/ recommendation.
3	7-9	A good response that focuses on many of the demands of the question. • A range of relevant knowledge and understanding of accounting principles, concepts and techniques is applied, but not always clearly and/or appropriately. • Accounting data is analysed and evaluated to make a balanced and reasoned judgement/ recommendation.
2	4–6	A reasonable response that focuses on some of the demands of the question. • Some relevant knowledge and understanding of accounting principles, concepts and techniques is applied, but lacking in clarity and appropriateness. • There is some analysis and evaluation of accounting data but the judgement/recommendation is either unbalanced or there are gaps in the reasoning.

		1	1–3	A limited response that has little focus on the demands of the question.	
				• Limited application of relevant knowledge and understanding of accounting principles, concepts and techniques to the context, often lacking in clarity and appropriateness.	
				• There is limited analysis and evaluation. The judgement/recommendation is lacking in both balance and reasoning.	
			0	Nothing written worthy of credit.	

Answers may include:

AO2 – Application

Payback of 3 years and 1 month is early in the 10-year operational life.
Payback does not consider cash flows after the payback period.
Cashflow after the payback period of 6 years and 11 months at £2 830 000 per year is expected to be £19 574 167.
Payback does not consider the time value of money.

AO3 – Analysis and evaluation

Financial
Cashflow after payback of £19 574 167 can be used for other purposes, such as reinvestment into the business.

The potential improvement in profits will be attractive to existing/new shareholders.

The redundancy cost of £876 000 is high which will have a negative effect on the cash flow at the start of the project. How will the project be financed?

Will there be any staff training costs?

How reliable are the figures provided? Is it realistic that the machinery could be sold for
£2 000 000? Changes in technology over this time period may make the machinery obsolete.

Non- financial
Redundancy will affect the morale of the remaining staff who may fear for their jobs meaning they may start looking for other jobs. The low morale could negatively impact productivity and reputation of RH Wheels Ltd in the community which could reduce profitability.

There will be a loss of skilled staff in the company.

Existing staff may need to be trained, which will take time, existing staff may not want to be retrained.

| | | If the machinery were to break down then production will stop whilst repairs take place, which could reduce output and profitability.

Changing the method of production may impact on customers e.g. they may value the fact that production is labour intensive (hand-made) and may not want automated production - this could reduce sales and impact accuracy of forecasts.

Marker note:
The indicative content is not exhaustive: other creditworthy material should be awarded marks as appropriate. | |