

Cambridge International AS & A Level

ACCOUNTING

9706/42

Paper 4 Cost and Management Accounting

October/November 2024

MARK SCHEME

Maximum Mark: 50

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2024 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

This document consists of **14** printed pages.

PUBLISHED**Generic Marking Principles**

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptions for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

PUBLISHED**GENERIC MARKING PRINCIPLE 5:**

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

PUBLISHED**Social Science-Specific Marking Principles
(for point-based marking)****1 Components using point-based marking:**

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

- a** DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
- b** DO credit alternative answers/examples which are not written in the mark scheme if they are correct
- c** DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require n reasons (e.g. State two reasons ...).
- d** DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- e** DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
- f** DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
- g** DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

PUBLISHED**3 Calculation questions:**

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

ANNOTATIONS

The following annotations are used in marking this paper and should be used by examiners.

Annotation	Use or meaning
✓	Correct and relevant point made in answering the question.
×	Incorrect point or error made.
LNK	Two statements are linked.
REP	Repeat
A	An extraneous figure
N0	No working shown
AE	Attempts evaluation
R1	Required item 1
R2	Required item 2
OF	Own figure
EVAL	Evaluation
NAQ	Not answered question
BOD	Benefit of the doubt given.
SEEN	Noted but no credit given
Highlight	Highlight
Off page Comment	Off page comment

Abbreviations and guidance

The following abbreviations may be used in the mark scheme:

OF = own figure. The answer will be marked correct if a candidate has correctly used their own figure from a previous part or calculation.

W = working. The working for a figure is given below. Where the figure has more than one mark associated with it, the working will show where individual marks are to be awarded.

CF = correct figure. The figure has to be correct i.e. no extraneous items have been included in the calculation

Extraneous item = an item that should not have been included in a calculation, including indirect expenses such as salaries in calculation of gross profit when there is one **OF** mark for gross profit'

Curly brackets, }, are used to show where one mark is given for more than one figure. If the figures are not adjacent, each is marked with a curly bracket and a symbol e.g. }*

row = all figures in the row must be correct for this mark to be awarded

Marks for figures are dependent on correct sign/direction

Accept other valid responses. This statement indicates that marks may be awarded for answers that are not listed in the mark scheme but are equally valid.

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Question	Answer	Marks																		
1(a)	<p>Explain <u>two</u> reasons why a business may conduct variance analysis.</p> <p>Comparing the actual result and the budget (1) so that actions can be taken for remedy or improvement (1) Measuring the performance of the managers (1) to determine bonus eligibility (1)</p> <p>Max 2 reasons, 2 marks each Accept other valid responses.</p>	4																		
1(b)	<p>State how to calculate a fixed overhead capacity variance.</p> <p>The difference between the total direct labour hours under fixed budget and the total actual labour hours (1) times the standard overhead absorption rate (1)</p> <p>Or (Standard hours for budgeted production – actual hours) (1) x Standard fixed overhead rate per hour (1)</p>	2																		
1(c)	<p>Prepare the flexible budget statement for the month of August.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;">\$</td> <td></td> </tr> <tr> <td>Sales (\$239 400 – \$5 400)</td> <td style="text-align: right;">234 000</td> <td>(1)</td> </tr> <tr> <td>Direct materials (\$44 640 – \$1 440)/(1 800 × \$24)</td> <td style="text-align: right;">43 200</td> <td>(1)</td> </tr> <tr> <td>Direct labour (\$106 020 + \$1 980)/(1 800 × 60)</td> <td style="text-align: right;">108 000</td> <td>(1)</td> </tr> <tr> <td>Fixed overhead (\$84 000 – \$12 000)/(1800 × 40)</td> <td style="text-align: right;"><u>72 000</u></td> <td>(1)</td> </tr> <tr> <td>Profit</td> <td style="text-align: right;">10 800</td> <td>(1)OF</td> </tr> </table>		\$		Sales (\$239 400 – \$5 400)	234 000	(1)	Direct materials (\$44 640 – \$1 440)/(1 800 × \$24)	43 200	(1)	Direct labour (\$106 020 + \$1 980)/(1 800 × 60)	108 000	(1)	Fixed overhead (\$84 000 – \$12 000)/(1800 × 40)	<u>72 000</u>	(1)	Profit	10 800	(1)OF	5
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1(d)	<p>Prepare a statement reconciling the flexible budget profit in (c) with the actual profit.</p> <table style="margin-left: 40px;"> <tr> <td></td> <td style="text-align: center;">\$</td> <td></td> <td></td> </tr> <tr> <td>Flexible budget profit</td> <td style="text-align: right;">10 800</td> <td></td> <td>(1) OF</td> </tr> <tr> <td>Variances</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sales price</td> <td style="text-align: right;">5 400</td> <td style="text-align: center;">F</td> <td style="text-align: center;">}</td> </tr> <tr> <td>Total direct material</td> <td style="text-align: right;">1 440</td> <td style="text-align: center;">A</td> <td style="text-align: center;">})(1)</td> </tr> <tr> <td>Total direct labour</td> <td style="text-align: right;">1 980</td> <td style="text-align: center;">F</td> <td style="text-align: center;">}</td> </tr> <tr> <td>Total fixed overhead</td> <td style="text-align: right;">12 000</td> <td style="text-align: center;">A</td> <td style="text-align: center;">})(1)</td> </tr> <tr> <td>Actual profit</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 3px double black;">4 740</td> <td></td> <td></td> </tr> </table>		\$			Flexible budget profit	10 800		(1) OF	Variances				Sales price	5 400	F	}	Total direct material	1 440	A	})(1)	Total direct labour	1 980	F	}	Total fixed overhead	12 000	A	})(1)	Actual profit	4 740			3
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1(e)	<p>Explain the likely reasons for the favourable direct labour variance of \$1 980 with reference to the analysis of its two sub-variances.</p> <p>The labour rate variance is \$3 420 A. (1) The higher wage may be due to more skilled labour or trained labour. (1) The labour efficiency variance is \$5 400 F. (1) The decreased hours worked may be due to the use of higher quality materials. (1)</p> <p>Accept other valid responses.</p>	4																																

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1(f)	<p>Advise the directors which option they should choose. Justify your answer.</p> <p>Option 1 Max (3) The modified product may be perceived to be poor quality / adverse effect on brand image (1). Loyal customers may not like the modified product / may cause demand to fall (1). This can save direct material cost to maintain or increase the current profit level (1). A modified product may be perceived as a new product and appeal to new customers (1).</p> <p>Option 2 Max (3) Advertising helps retain existing customers (1). Advertising increases the awareness of the product / less advertising may lead to the loss of customers (1). Reducing advertising cost may maintain or increase profit (1). Reducing advertising cost can avoid the company increasing the selling price. (1).</p> <p>Decision supported with a comment (1) Accept other valid responses.</p>	7

Question	Answer	Marks																																			
2(a)(i)	<p>Calculate:</p> <p>the net present value (NPV)</p> <table style="margin-left: 40px;"> <thead> <tr> <th></th> <th style="text-align: center;">Net cashflow \$</th> <th style="text-align: center;">12%</th> <th style="text-align: center;">PV \$</th> <th></th> </tr> </thead> <tbody> <tr> <td>Year 0</td> <td style="text-align: right;">(240 000)</td> <td style="text-align: center;">1</td> <td style="text-align: right;">(240 000)</td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Year 1 W1</td> <td style="text-align: right;">87 000 (1)</td> <td style="text-align: center;">0.893</td> <td style="text-align: right;">77 691</td> <td style="text-align: right;">}</td> </tr> <tr> <td>Year 2</td> <td style="text-align: right;">87 000</td> <td style="text-align: center;">0.797</td> <td style="text-align: right;">69 339</td> <td style="text-align: right;">}</td> </tr> <tr> <td>Year 3</td> <td style="text-align: right;">87 000</td> <td style="text-align: center;">0.712</td> <td style="text-align: right;">61 944</td> <td style="text-align: right;">}</td> </tr> <tr> <td>Year 4</td> <td style="text-align: right;">87 000</td> <td style="text-align: center;">0.636</td> <td style="text-align: right;"><u>55 332</u></td> <td style="text-align: right;">} (1)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">NPV</td> <td style="text-align: right;"><u>24 306</u></td> <td style="text-align: right;">(1)OF</td> </tr> </tbody> </table> <p>OR</p> <p>$\\$87\,000 (1) \times 3.038 (1) - \\$240\,000 (1) = \\$24\,306 (1)OF$</p> <p>W1</p> <p>$\\$27\,000 + (\\$240\,000/4) = \\$87\,000$</p>		Net cashflow \$	12%	PV \$		Year 0	(240 000)	1	(240 000)	(1)	Year 1 W1	87 000 (1)	0.893	77 691	}	Year 2	87 000	0.797	69 339	}	Year 3	87 000	0.712	61 944	}	Year 4	87 000	0.636	<u>55 332</u>	} (1)			NPV	<u>24 306</u>	(1)OF	4
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2(a)(ii)	<p>Calculate:</p> <p>the internal rate of return (IRR)</p> <p>NPV at the discount rate of 18% $\\$87\,000 \times 2.69 \text{ (1)} - \\$240\,000 = (\\$5\,970) \text{ (1)OF}$ $12\% + \\$24\,306 / (\\$24\,306 + \\$5\,970) \text{ (1)OF} \times (18\% - 12\%) \text{ (1)} = 16.82\% \text{ (1)OF}$</p> <p>Alternatively</p> <table border="1" data-bbox="338 488 1202 946"> <thead> <tr> <th></th> <th>\$</th> <th></th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>(240 000)</td> <td>1.00</td> <td>(240 000)</td> </tr> <tr> <td>1</td> <td>87 000</td> <td>0.847}</td> <td>73 689</td> </tr> <tr> <td>2</td> <td>87 000</td> <td>0.718}</td> <td>62 466</td> </tr> <tr> <td>3</td> <td>87 000</td> <td>0.609}</td> <td>52 983</td> </tr> <tr> <td>4</td> <td>87 000</td> <td>0.516}{(1)</td> <td>44 892</td> </tr> <tr> <td colspan="3">NPV</td> <td>(5 970) (1)OF</td> </tr> </tbody> </table> <p>$12\% + \\$24\,306 / (\\$24\,306 + \\$5\,970) \text{ (1)OF} \times (18\% - 12\%) \text{ (1)} = 16.82\% \text{ (1)OF}$</p>		\$		\$	0	(240 000)	1.00	(240 000)	1	87 000	0.847}	73 689	2	87 000	0.718}	62 466	3	87 000	0.609}	52 983	4	87 000	0.516}{(1)	44 892	NPV			(5 970) (1)OF	5
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2(a)(iii)	<p>Calculate:</p> <p>the accounting rate of return (ARR)</p> <p>$\text{ARR} = (27\,000 \text{ (1)} / 120\,000 \text{ (1)}) \times 100 = 22.5\% \text{ (1)OF}$</p>	3																												

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2(b)	<p>Discuss whether the directors should be concerned about the uncertainty over the estimated sales revenue. Support your answer with calculations.</p> <table style="margin-left: 40px;"> <tr> <td></td> <td style="text-align: center;">Net cashflow</td> <td style="text-align: center;">12%</td> <td style="text-align: center;">PV</td> </tr> <tr> <td></td> <td style="text-align: center;">\$</td> <td></td> <td style="text-align: center;">\$</td> </tr> <tr> <td>Year 0</td> <td style="text-align: right;">(240 000)</td> <td style="text-align: center;">1</td> <td style="text-align: right;">(240 000)</td> </tr> <tr> <td>Year 1</td> <td style="text-align: right;">67 000</td> <td style="text-align: center;">0.893}</td> <td style="text-align: right;">59 831</td> </tr> <tr> <td>Year 2</td> <td style="text-align: right;">67 000</td> <td style="text-align: center;">0.797}</td> <td style="text-align: right;">53 399</td> </tr> <tr> <td>Year 3</td> <td style="text-align: right;">67 000</td> <td style="text-align: center;">0.712}</td> <td style="text-align: right;">47 704</td> </tr> <tr> <td>Year 4</td> <td style="text-align: right;">67 000</td> <td style="text-align: center;">0.636} (1)</td> <td style="text-align: right;">42 612</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">NPV</td> <td style="text-align: right;"><u>(36 454) (1)OF</u></td> </tr> </table> <p>OR \$67 000 (1)OF × 3.038 (1) – \$240 000 = \$(36 454) (1) OF</p> <p>Comments</p> <p>NPV / investment appraisal always depends on estimates (1) The NPV reduces / is negative (1) The directors should be concerned about the uncertainty / would change their decision (1)</p> <p>Max 3 for calculations Max 3 for comments Accept other valid responses.</p>		Net cashflow	12%	PV		\$		\$	Year 0	(240 000)	1	(240 000)	Year 1	67 000	0.893}	59 831	Year 2	67 000	0.797}	53 399	Year 3	67 000	0.712}	47 704	Year 4	67 000	0.636} (1)	42 612			NPV	<u>(36 454) (1)OF</u>	6
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2(c)	<p>Advise the directors which option they should choose. Justify your answer.</p> <p>Option 1 max (3) No need to spend money to design new product in Year 5 and 6 (1). No need to buy new machine for 2 years (1). No need to train workers for 2 years (1). Should plan beyond these extra 2 years (1). The annual profit will increase from year 4 due to there being no depreciation (1). The annual profit may decrease due to increased repairs and maintenance cost (1). It is uncertain whether the sales level can be maintained (1).</p> <p>Option 2 max (3) Should plan for replacing a declining product by a new product in order to sustain profitability (1). New product can appeal to existing customers / diversification as well as new customers (1). More time and cost may be needed for designing a new product (1). A new machine for Product B may be required (1). Workers need training for new machine (1). The commercial success of Product B is uncertain (1).</p> <p>Decision supported with a comment (1) Accept other valid responses</p>	7