Cambridge Assessment International Education

Cambridge International AS & A Level

ACCOUNTING **9706/41**

Paper 4 Cost and Management Accounting **May/June 2023**

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.

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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 descriptors 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.

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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.

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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).

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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.

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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

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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)(i)	**Calculate:** **the net present value (NPV) of the dig** Year 0: proceeds –, govt –, costs (100 000), net cash flow (100 000), discount factor –, discounted cash flow (100 000) **(1)** Year 1: proceeds 225 000 **}**, govt (22 500), costs (116 500), net cash flow 86 000 **(1)**, discount factor 0.909, discounted cash flow 78 174 **}** Year 2: proceeds 125 000 **}(1)**, govt (12 500), costs (98 500), net cash flow 14 000 **(1)**, discount factor 0.826, discounted cash flow 11 564 **}** Year 3: proceeds 100 000 **}**, govt (10 000), costs (67 000), net cash flow 23 000 **(1)**, discount factor 0.751, discounted cash flow 17 273 **}** Year 4: proceeds 50 000 **}(1)**, govt (5 000), costs (23 000), net cash flow 22 000 **(1)**, discount factor 0.683, discounted cash flow 15 026 **}(1)OF** net cash flow 45 000 NPV = $22 037 **(1)OF**	**9**
1(a)(ii)	**the payback period** Year 0: $ (100 000) **(1)** Year 1: 86 000 **}** Year 2: 14 000 **} (1)OF** 0 Payback period = 2 years **(1)OF**	**3**
1(a)(iii)	**the accounting rate of return (ARR).** total profit 45 000 **(1)OF** average profit 45 000/4 = 11 250 **(1)OF** average investment 100 000/2 = 50 000 **(1)** ARR 11 250/50 000 × 100 = 22.5% **(1)OF**	**4**

Question	Answer	Marks
1(b)	**Advise Barry whether or not he should go ahead with the dig in this field. Justify your answer.** **Max 6 marks** for comments **1 mark** for decision supported by a comment. The NPV is positive which indicates that it would be financially beneficial **(1).** The payback period is short which indicates lower risk **(1).** The ARR is well in excess of his cost of capital **(1).** The NPV method is considered to be the most reliable method **(1).** Despite the short payback period this is inherently a very risky venture **(1).** Barry cannot be certain of the quantity and condition of the items he plans to dig up **(1).** Nor can he be certain of the proceeds as museums may have limited budgets **(1)** and the value of any one item is difficult to evaluate as it may well be unique **(1).** There may be additional costs such as returning the field to its original condition for handing back to the farmer **(1).** **Accept other valid responses.**	**7**
1(c)	**State <u>two</u> disadvantages of using ARR for investment decisions.** It ignores the time value of money **(1).** It ignores the timing of cash flows **(1).** **Max 2** **Accept other valid responses.**	**2**

Question	Answer	Marks
2(a)	**Prepare the production budget (in units) for <u>each</u> of the months from January to April.**	**7**

	January		February		March		April	
Opening inventory	1 500	**(1)**	2 100	**}**	3 200	**}**	400	**} (1)**
Production	6 600		9 500		10 000	**(1)**	10 000	**(1)**
	8 100		11 600		13 200		10 400	
Sales	(6 000)		(8 400)		(12 800)		(10 400)	**(1)**
Closing inventory	2 100	**(1)**	3 200		400		0	**(1)**

Question	Answer	Marks
2(b)	**Explain how the budgeted revenue for the four months from January to April should be calculated.** The number of sales units which equals the demand times the selling price **(1)** but the production constraint must be taken into account for the sales arising in April **(1)** **Max 2** **Accept other valid responses.**	**2**
2(c)	**Advise the directors whether or not they should invest in a new, larger storage facility. Justify your answer.** **Max 6 marks** for comments **1 mark** for decision supported by a comment. This would enable the business to build up their inventory prior to times of expected high demand **(1)** which should reduce the possibility of losing sales because of a lack of goods **(1).** If the business had been able to hold more units of inventory at the end of February then sales would not have been lost in April **(1).** This would also require a change to the policy of holding only 25% of the following month's sales **(1).** The business would have space to keep an inventory of direct materials as well as finished goods **(1)** reducing the risk inherent in relying so heavily on the ability of the supplier to keep up with demand **(1).** The cost of the new facility could exceed the profit foregone on the lost sales **(1).** There would be an impact on cash flow **(1)** and storage costs would also increase **(1).** The more inventory is held, the greater the chances of some or all being damaged, stolen, or becoming obsolete or out of fashion **(1).** It might be better to concentrate on increasing the maximum number of units which can be produced in a month **(1)** but if demand falls then it will have resulted in unnecessary costs **(1).**	**7**

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Question	Answer	Marks
2(d)	**Prepare the trade payables budget for each of the months of February and March. Include the balance of trade payables at the beginning and the end of <u>each</u> month. Assume that production is still as in your answer to part <u>(a)</u>.**	7

	February $		March $	
Opening trade payables	39 600 **W1**	**(2)OF**	66 500	**(1)OF**
Purchases	133 000		140 000	**(1)OF both**
	172 600		206 500	
Bank – previous month	(39 600)		(66 500)	**(1)OF both**
Bank –current month	(66 500)		(70 000)	**(1)OF both**
Closing trade payables	66 500		70 000	**(1)OF both**

W1 (6 600 × 6 × 2) **(1)OF)** × 50% = $39 600 **(1)OF**

2(e)	**Explain how this change would affect the budgeted statement of profit or loss.** The budgeted statement of profit or loss would then include an entry for discount received. **(1)** This would increase budgeted profit by 2% of purchases **(1) OR** Budgeted cost of sales/gross profit would be unchanged **(1).**	2

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