

# Cambridge International AS & A Level

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**THINKING SKILLS****9694/21**

Paper 2 Critical Thinking

**May/June 2025****MARK SCHEME**

Maximum Mark: 50

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**Published**

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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 May/June 2025 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

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This document consists of **15** printed pages.

**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.

**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.

**Annotations guidance for centres**

Examiners use a system of annotations as a shorthand for communicating their marking decisions to one another. Examiners are trained during the standardisation process on how and when to use annotations. The purpose of annotations is to inform the standardisation and monitoring processes and guide the supervising examiners when they are checking the work of examiners within their team. The meaning of annotations and how they are used is specific to each component and is understood by all examiners who mark the component.

We publish annotations in our mark schemes to help centres understand the annotations they may see on copies of scripts. Note that there may not be a direct correlation between the number of annotations on a script and the mark awarded. Similarly, the use of an annotation may not be an indication of the quality of the response.

The annotations listed below were available to examiners marking this component in this series.

**Annotations**

Annotation	Meaning
✓	In <b>Qs 1, 3 and 4</b> use to indicate where each mark has been awarded (except in <b>Q1(a)</b> )
✗	Use to indicate an answer or element that is wrong
NGE	Not good enough. Use wherever such a judgment has been made.
BOD	Benefit of doubt
AE	In <b>Q5</b> use to indicate creditworthy other argument element In <b>Q3</b> use to indicate 'significant additional element'
CON	In <b>Qs 2 and 5</b> use to indicate 'conclusion'
C	In <b>Qs 2 and 5</b> and in short questions where indicated, use to indicate that marks have been capped because an essential element of the answer is absent
EVAL	In <b>Q2</b> use to indicate creditworthy evaluation of a source
I	In <b>Q5</b> use to indicate creditworthy intermediate conclusion
P	In <b>Q2</b> use to indicate creditworthy personal thinking In <b>Q3</b> use to indicate paraphrase
R	In <b>Q2</b> use to indicate creditworthy inferential reasoning In <b>Q5</b> use to indicate creditworthy reason used to support a conclusion
S	In <b>Q2</b> use to indicate creditworthy use of a source In <b>Q5</b> use to indicate distinct strand of reasoning
A	In appropriate cases, use to indicate significant omission In <b>Q3</b> use to indicate 'significant omission'
SEEN	Use when an element of an answer which would normally be credited cannot receive a mark because of a rubric; e.g., in <b>Q5</b> use when a type of argument element has already been credited in the same strand of reasoning Use in answers when no other annotations have been used Use on blank pages
<b>Highlighter</b>	Use to draw attention to part of an answer

There must be at least one annotation on each page of the answer booklet.

Question	Answer	Marks
1(a)	<p><b>Is Source C an argument? Justify your answer.</b></p> <p>2 marks for a correct answer with accurate explanation (3 ticks)  1 mark for a correct answer with vague, incomplete or generic explanation (2 ticks)  0 marks for a correct answer without explanation (1 tick)  0 marks for an incorrect answer with or without explanation (0 ticks)</p> <p><b>2-mark answers</b></p> <ul style="list-style-type: none"> <li>Source C is not an argument ✓. It explains why an action is being taken ✓, but there is no (supported, persuasive) conclusion ✓.</li> <li>Source C is not an argument ✓. It explains why an action is being taken ✓, but does not attempt to persuade ✓.</li> <li>Source C is not an argument ✓. It states what the sportsmen are claiming ✓, but it does not support their claim ✓.</li> </ul> <p><b>1-mark answers</b></p> <ul style="list-style-type: none"> <li>Source C is not an argument ✓, because it does not include a (supported, persuasive) conclusion ✓.</li> <li>Source C is not an argument ✓. It explains why an action is being taken ✓.</li> </ul> <p><b>0-mark answers</b></p> <ul style="list-style-type: none"> <li>Source C is not an argument ✓, because it states only one opinion ✗.</li> <li>Source C is an argument ✗.....</li> </ul>	2
1(b)	<p><b>Assess the reliability of Source E.</b></p> <p>1 mark each for up to four valid points</p> <p><b>Examples of valid answers:</b></p> <ul style="list-style-type: none"> <li>The blog's reliability is increased by its <b>expertise</b> in child welfare.</li> <li>The reliability is enhanced by the blog's <b>reverse vested interest/bias</b> to protect children from risks to their welfare.</li> <li>As a surgeon, the Canadian neurosurgeon has a high status in society: so his <b>reputation</b> enhances the reliability of his opinion.</li> <li>As a neurosurgeon, he has good <b>ability to see</b> the consequences of head injuries caused by playing contact sports,</li> <li>but perhaps limited <b>ability to see</b> other types of injuries/harm.</li> <li>He has no apparent <b>vested interest</b> to encourage the playing of contact sports,</li> <li>but his reliability is enhanced by his <b>vested interest</b> to maintain a high professional reputation.</li> <li><i>Allow:</i> he has <b>vested interest</b> to encourage more brain injuries so that he and his colleagues can make more money by treating them.</li> <li>His <b>expertise</b> in neurology enhances the reliability of his opinion about the dangers of playing contact sports.</li> <li>His opinion about the benefits of playing contact sports is enhanced by his <b>experience/ability to know</b>, having played them himself.</li> <li>As a doctor, he has <b>expertise</b> in the health benefits of sport.</li> <li>Having weighed both sides, he appears to be <b>neutral</b> / have no <b>bias</b>.</li> </ul>	4

Question	Answer	Marks
1(c)	<p><b>Identify one weakness in the support given in Source E for the playing of contact sports by young people.</b></p> <p><b>2 mark answer:</b></p> <ul style="list-style-type: none"> <li>• The neurosurgeon identifies benefits of ‘team sports’, which are not the same as ‘contact sports’.</li> </ul> <p><b>1 mark answers:</b></p> <ul style="list-style-type: none"> <li>• The benefits the neurosurgeon identifies apply equally to non-contact sports / other activities: so his reasoning does not support playing contact sports in particular.</li> <li>• The neurosurgeon’s reasoning is a rash/hasty generalisation, based only on his own experience.</li> </ul>	2
1(d)	<p><b>State and explain one reason why it is not possible to conclude reliably from Source B that heading footballs is dangerous.</b></p> <p><i>Up to 2 marks for any one of the following:</i></p> <ul style="list-style-type: none"> <li>• The case of Jeff Astle could be an isolated case [1] and cannot validly be generalised to all soccer players [1].</li> <li>• Because modern footballs are lighter than in Astle’s day / than when the soccer players studied by Glasgow University were playing [1], heading them is less likely to be harmful [1].</li> <li>• Although the Glasgow research establishes a correlation between playing soccer professionally and an increased risk of dementia [1], it does not attribute it specifically to heading / it does not establish a causal link [1].</li> </ul>	2
1(e)	<p><b>Suggest and explain two possible reasons why the link between playing American football and developing CTE may not be as strong as it appears in Source A.</b></p> <p><i>Up to 2 marks each for up to two of the following:</i></p> <ul style="list-style-type: none"> <li>• More people may have offered their brains for research [1] because they were experiencing symptoms of CTE / expected their cases to be of interest to the researchers [1].</li> <li>• More players from particular playing positions may have offered their brains for research [1] and players from those positions may be more liable to develop CTE (than players in other positions) [1].</li> <li>• There isn’t any information about the rate of CTE in non-footballers [1]; so we don’t know if the rate among footballers is significantly higher [1].</li> <li>• There is no information about possible causes of head impacts/CTE other than football among the subjects [1]; for example, football players may be more likely to engage in other high-risk activities [1].</li> <li>• If a high proportion of Americans play football in high school [1], then a fairly high rate of CTE amongst people who previously played football in high school does not necessarily indicate a link between playing football and CTE [1].</li> <li>• <i>Allow for 1 mark:</i> Innovative safety precautions have been introduced in recent years: so any danger is significantly reduced compared with when those players were playing.</li> </ul>	4

Question	Answer	Marks										
2	<p><b>'Children should not be allowed to play contact sports.'</b></p> <table border="1"> <tr> <td><b>Conclusion</b></td><td>1 mark for an explicit supported conclusion <i>Cap at 7 if conclusion is absent or implicit</i></td></tr> <tr> <td><b>Use of sources</b></td><td>2 marks for use of 4 or 5 sources 1 mark for use of 1–3 sources</td></tr> <tr> <td><b>Evaluation of sources</b></td><td>1 mark for each valid evaluation of the credibility or quality of reasoning in sources <i>Maximum 3 marks</i></td></tr> <tr> <td><b>Inferential reasoning from sources</b></td><td>1 mark each <i>Maximum 3 marks</i> <i>Source must be mentioned for this to be credited</i></td></tr> <tr> <td><b>Personal thinking</b></td><td>1 mark each <i>Maximum 2 marks</i></td></tr> </table>	<b>Conclusion</b>	1 mark for an explicit supported conclusion <i>Cap at 7 if conclusion is absent or implicit</i>	<b>Use of sources</b>	2 marks for use of 4 or 5 sources 1 mark for use of 1–3 sources	<b>Evaluation of sources</b>	1 mark for each valid evaluation of the credibility or quality of reasoning in sources <i>Maximum 3 marks</i>	<b>Inferential reasoning from sources</b>	1 mark each <i>Maximum 3 marks</i> <i>Source must be mentioned for this to be credited</i>	<b>Personal thinking</b>	1 mark each <i>Maximum 2 marks</i>	8
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<b>Personal thinking</b>	1 mark each <i>Maximum 2 marks</i>											

**Annotation**

**Annotate answers as follows:**

**CON** To indicate 'conclusion'.

**S** To indicate creditworthy use of source.

**EVAL** To indicate creditworthy evaluation of source.

**R** To indicate creditworthy inferential reasoning.

**P** To indicate creditworthy personal thinking.

**C** To indicate that mark has been capped.

**X** To indicate incorrect material.

**Indicative content**

- Source A records research which shows that a significant proportion of people who played American football in high school were diagnosed with CTE after death;
- however, there is insufficient information given to know whether that proportion is higher than in the general population.
- The case of Jeff Astle referred to in Source B suggests that heading footballs may cause brain damage,
- but modern footballs are much lighter
- and a general inference cannot be drawn from a single case.
- The Glasgow research referred to in Source B identified a statistical link between professional football playing and dementia,

Question	Answer	Marks
2	<ul style="list-style-type: none"> <li>but this link does not necessarily have any implications for playing soccer in schools or junior clubs.</li> <li>Source C alleges a link between professional playing of rugby and long-term head injury,</li> <li>but there is no suggestion that this would apply to young people.</li> <li>Source D shows that the possibility of injury imposes serious legal and financial obligations on schools and sport clubs</li> <li>and also shows that it is possible to modify contact sports in order to reduce the risk of harm and hence liability.</li> <li>The reliability of this source is strengthened by expertise, because the author is a 'lawyer specialising in sport law'.</li> <li>Source E identifies benefits to young people of playing team sports,</li> <li>but these benefits are not limited to contact sports.</li> </ul> <p><b>Example 8-mark answer (264 words)</b></p> <p><b>5</b> Source A shows that a significant proportion of people who played American football in high school were diagnosed with CTE after death; however, there is <b>EVAL</b> insufficient information given to know whether that proportion is higher than in the general population.</p> <p><b>5</b> The case of Jeff Astle in Source B suggests that heading footballs may cause brain damage, but modern footballs are much lighter and the case of a professional sportsman <b>R</b> is not necessarily relevant to children. Similarly, the <b>5</b> Glasgow research identified a statistical link between professional soccer playing and dementia, while source C alleges a link between professional playing of rugby and long-term head injury. However, these links do not <b>R</b> necessarily have any implications for playing soccer or rugby in schools or junior clubs.</p> <p><b>5</b> Source D shows that the possibility of injury imposes serious legal obligations on schools and sport clubs. Because <b>R</b> these may be prohibitively expensive in time, expertise and money, they constitute the strongest motivation for reducing the risk of injury to young players. The reliability of this source is strengthened <b>EVAL</b> by expertise, because the author is a "lawyer specialising in sport law".</p> <p><b>5</b> Source E identifies benefits to young people of playing team sports, but these <b>EVAL</b> benefits are not limited to contact sports and would presumably apply equally to sports modified in ways such as those suggested in Source D.</p>	

Question	Answer	Marks
2	Overall, therefore, even though the evidence does not prove that contact sports pose a risk to children, it is best to be on the safe side and to restrict children to modified versions of contact sports, such as those identified in Source D.	

Question	Answer	Marks
<b>In Q3, annotate as follows:</b>		
<p><b>AE</b> Significant additional element</p> <p><b>A</b> Significant omission</p> <p><b>P</b> Paraphrase</p>		
<i>In Q3(a) and (d), if two answers are given, one of which is correct, award 1 mark.</i>		
<i>In all parts of Q3, apply guidance relating to additional material <b>only</b> if it constitutes an additional part of an answer or an alternative answer.</i>		
3(a)	<p><b>Identify the main conclusion.</b></p> <p>2 marks for an exact answer 1 mark for a paraphrase, or for <b>one</b> additional element or omission</p> <p>It is foolish to trust that someone will keep confidential information secret.</p>	2
3(b)	<p><b>Identify two intermediate conclusions from paragraphs 2 to 4.</b></p> <p>For up to 2 of the following: 2 marks for an exact answer 1 mark for a paraphrase, or for <b>one</b> additional element or omission</p> <ul style="list-style-type: none"> <li>• (However,) professional confidentiality is not as secure as clients might think.</li> <li>• These workers are unlikely to keep information secret.</li> <li>• Entrusting a secret to a counsellor is as insecure as announcing it in a television advertisement.</li> </ul>	4
3(c)	<p><b>Identify the argument element and explain the function of the following words from paragraph 5:</b></p> <p><b>'Even people who explicitly promise to keep something secret often find a way to justify breaking the confidentiality'</b></p> <p>A reason [1] directly supporting the main conclusion / supporting the claim, 'It is foolish to trust that someone will keep confidential information secret.' [1].</p>	2

Question	Answer	Marks
3(d)	<p><b><i>Identify one unstated assumption required by the argument in paragraph 3.</i></b></p> <p><i>2 marks for a precise version of any of the following: 1 mark for an incomplete or vague version of any of the following:</i></p> <ul style="list-style-type: none"><li>• Workers are more likely to maintain confidentiality if they realise that they have a duty to do so.</li><li>• Professional disciplinary bodies are likely to be successful in enforcing the duty of confidentiality.</li><li>• The only reasons workers will keep confidentiality are sense of duty and fear of disciplinary action.</li></ul>	<b>2</b>

Question	Answer	Marks
4(a)	<p><b>Identify an example of personal attack (ad hominem) in the passage.</b></p> <p>The reference to opponents 'exploiting' people in the final sentence of the passage is an example of a personal attack.</p>	1
4(b)	<p><b>Identify and explain one flaw or weakness in the reasoning in paragraph 2.</b></p> <p>(The final sentence in the paragraph is) a slippery slope argument [1] because it alleges / it is not inevitable that extreme consequences/public knowledge will necessarily follow from a limited breach of confidentiality by a professional [1]. This is especially unlikely if the initial breach is done as a referral or part of supervision [1], because there are strict rules governing exceptions to confidentiality [1].</p>	3
4(c)	<p><b>Evaluate an analogy in paragraph 4.</b></p> <ul style="list-style-type: none"> <li>• The analogy compares entrusting a secret to a counsellor with announcing it in a television advertisement [1].</li> <li>• Both scenarios refer to allowing information to be known [1],</li> <li>• but the <b>scale</b> of revelation in the two scenarios is very different [1]. (<i>Simply saying the two scenarios are different is not sufficient for a mark.</i>)</li> <li>• There is a big difference between permitting disclosure under exceptional circumstances and publicising something deliberately [1],</li> <li>• and also between making a targeted report and making a random broadcast [1].</li> <li>• The analogy is based on generalising from a relatively rare category (crime) of conversation with a counsellor [1].</li> </ul>	3
4(d)	<p><b>'Even people who explicitly promise to keep something secret often find a way to justify breaking the confidentiality.' (Paragraph 5)</b></p> <p><b>How well does the evidence in paragraph 5 support this claim?</b></p> <p>The evidence is an example which shows it <b>can</b> happen / <b>has</b> happened (that 'Even people who explicitly promise to keep something secret' find/have found 'a way to justify breaking the confidentiality') [1], but a single instance does not prove that this '<b>often</b>' occurs / this single example is a rash (hasty) generalisation [1]. This example does not necessarily consist of sharing confidential information with other people [1]. So the support is only moderate [1].</p> <p><i>Award judgment mark only if both sides are considered. If the content is too weak to deserve a mark in its own right, but is an attempt at a correct answer, the judgment mark may be awarded, but if the content is incorrect, the judgment mark must not be awarded.</i></p>	3

Question	Answer	Marks										
5	<p><b>'Everyone needs a friend they can trust.'</b></p> <table border="1"> <tr> <td><b>Conclusion</b></td><td>1 mark for supported conclusion in acceptable format</td></tr> <tr> <td><b>Reasons</b></td><td>2 marks for three or more reasons supporting conclusions 1 mark for one or two reasons supporting conclusions</td></tr> <tr> <td><b>Inferential reasoning</b></td><td>1 mark for each use of an intermediate conclusion or chain of intermediate conclusions <i>(including if used in a response to a counter)</i> <b>Maximum 3 marks</b></td></tr> <tr> <td><b>Argument elements</b></td><td>1 mark for each use of other argument elements that strengthens the reasoning: counter with response, example, evidence, analogy, hypothetical reasoning <i>Credit each type only once per strand of reasoning</i> <b>Maximum 3 marks</b></td></tr> <tr> <td><b>Structure</b></td><td>1 mark for two or more distinct strands of reasoning</td></tr> </table> <p><i>Each component of a candidate response may score only once. Where there is more than one possibility, use the classification which leads to the higher total mark.</i></p> <p><i>Maximum 6 marks for no conclusion or wrong conclusion, or a conclusion that does not follow from the reasoning, or if both sides are argued without a resolution.</i></p> <p><i>No credit for material unrelated to the claim given on the question paper. No credit for material reproduced from the passage.</i></p> <p><b>Annotate answers as follows:</b></p> <ul style="list-style-type: none"> <li><b>CON</b> To indicate main conclusion.</li> <li><b>R</b> To indicate creditworthy reason used to support a conclusion.</li> <li><b>I</b> To indicate creditworthy intermediate conclusion.</li> <li><b>AE</b> To indicate creditworthy other argument element.</li> <li><b>S</b> To indicate distinct strand of reasoning.</li> <li><b>C</b> To indicate that mark has been capped.</li> <li><b>SEEN</b> When a type of argument element has already been credited in the same strand of reasoning.</li> <li><b>X</b> To indicate material that is judged not to have a structural function in the argument.</li> </ul> <p>Use <b>highlighter</b> to indicate material which is not relevant to the stated claim or is derived from the passage.</p>	<b>Conclusion</b>	1 mark for supported conclusion in acceptable format	<b>Reasons</b>	2 marks for three or more reasons supporting conclusions 1 mark for one or two reasons supporting conclusions	<b>Inferential reasoning</b>	1 mark for each use of an intermediate conclusion or chain of intermediate conclusions <i>(including if used in a response to a counter)</i> <b>Maximum 3 marks</b>	<b>Argument elements</b>	1 mark for each use of other argument elements that strengthens the reasoning: counter with response, example, evidence, analogy, hypothetical reasoning <i>Credit each type only once per strand of reasoning</i> <b>Maximum 3 marks</b>	<b>Structure</b>	1 mark for two or more distinct strands of reasoning	8
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Question	Answer	Marks
5	<p><b>Example 8-mark answers</b></p> <p><i>Support (172 words)</i></p> <p><b>R</b> Occasions arise in everyone's life when they need to seek advice. These situations range from relatively minor matters, such as buying new clothes, to the choice of a career or a marriage partner. Because this advice must be reliable, it needs to come from someone who knows them well and will say what they really think. If they were to ask a family member, the advice would be likely to be distorted by prejudice and self-interest. So it needs to come from a friend.</p> <p><b>S</b> <b>I</b> <b>R</b> Everyone needs practical help from time to time, because they lack the necessary skills or because they are not in the right place at the right time or because some jobs require two people. Some people think they can pay for whatever help they need, but not every task falls within the role of an appropriate professional, or the cost or waiting time may be prohibitive. So everyone needs to know they can call on a friend to help them.</p> <p><b>CON</b> Therefore everyone needs a friend they can trust.</p> <p><i>Challenge (131 words)</i></p> <p><b>AE</b> <b>R</b> Although many people do need a friend they can trust, some prefer to be self-sufficient. This may be a natural personality trait or because of a previous experience, such as being let down by a friend. Because they have learned to rely on themselves, they do not need other people.</p> <p><b>S</b> <b>R</b> <b>AE</b> Some families are very close and supportive. If an emergency were to occur in the life of a member, they would know that a relative would be able and willing to help. So they never need to turn outside the family. Members of such families have to devote a lot of time and emotional energy into maintaining family relationships; so it would be unnecessary and unrealistic for them to develop close friendships.</p> <p><b>CON</b> Therefore not everyone needs a friend they can trust.</p>	

Question	Answer	Marks
5	<p><i>Acceptable ‘challenge’ conclusions:</i></p> <ul style="list-style-type: none"><li>• Not everyone needs a friend they can trust.</li><li>• Everyone does not need a friend they can trust.</li><li>• No-one needs a friend they can trust.</li></ul>	