



## **Cambridge International AS & A Level**

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**THINKING SKILLS**

**9694/22**

Paper 2 Critical Thinking

**October/November 2023**

**MARK SCHEME**

Maximum Mark: 50

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**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 2023 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 **12** 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 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.















**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**

	In Qs 1, 3 and 4 use to indicate where marks have been awarded.
	Use to indicate an answer or element that is wrong.
	Not good enough. Use wherever such a judgment has been made.
	Benefit of doubt.
	In Q5 use to indicate creditworthy other argument element. In Q3 use to indicate 'significant additional element'.
	In Qs 2 and 5 use to indicate 'conclusion'.
	In Qs 2 and 5 and in short questions where indicated, use to indicate that marks have been capped because an essential element of the answer is absent.
	In Q2 use to indicate creditworthy evaluation of a source.
	In Q5 use to indicate creditworthy intermediate conclusion.
	In Q2 use to indicate creditworthy personal thinking. In Q3 use to indicate paraphrase.
	In Q2 use to indicate creditworthy inferential reasoning. In Q5 use to indicate creditworthy reason used to support a conclusion.
	In Q2 use to indicate creditworthy use of a source. In Q5 use to indicate distinct strand of reasoning.
	In appropriate cases, use to indicate significant omission. In Q3 use to indicate 'significant omission'.
	In Q5 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>Highlight</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>The source is (very/mainly) reliable [1]. The reliability is strengthened by <i>expertise</i>, since no one would write or publish a textbook aimed at university students without being an expert on the subject [1]. It is clear from the content that the author has access to relevant data (good <i>ability to see</i>) [1], although he/she does not have <i>ability to see</i> what he/she claims occurred 10 000–12 000 years ago. The information is factual and <i>neutral</i>, with no attempt to persuade the reader to adopt a controversial interpretation [1]. The author has a <i>vested interest</i> to provide accurate information in order to promote sales of the book / his/her own reputation and career / understanding of the subject [1] and <b>no</b> plausible <i>vested interest</i> to misrepresent the facts [1]; (but <i>accept</i> the author/publisher might have a <i>vested interest</i> to make controversial claims in order to increase sales [1]).</p> <p><i>No judgment mark without support.</i></p>	4
1(b)	<p>The problems described in paragraph 1 will be avoided [1], unless the patient is consuming lactose from another source [1], or the same symptoms are caused by something else in the milk substitute or their diet [1]. We don't know if the substitutes contain the ingredients needed to avoid the problems mentioned in paragraph 2 (<i>accept</i> will avoid...) [1], or whether they do contain other ingredients which might lead to them [1].</p>	2
1(c)	<p><i>1 mark for identifying and 1 mark for explaining each of up to two weaknesses. For example,</i></p> <ul style="list-style-type: none"> <li>• It states that milk is designed for newborn animals in support of the claim, but this does not support the idea that it is good for all other ages/humans [1], who may have very different nutritional requirements [1].</li> <li>• The list of nutrients does not mention the extent to which they are needed by healthy adults [1]; if they are not essential, milk is not as beneficial as the author claims [1].</li> <li>• The list of nutrients does not mention whether adequate quantities are supplied by other elements of a normal diet [1]; if they are, then milk is not as significant as the author claims [1].</li> <li>• The source does not state the amount of milk which is needed to provide a healthy intake (RDA) of the nutrients listed [1]; it could be so great as to have other negative consequences on health [1].</li> <li>• The references to the possibility of fractures and muscle health and repair are both prefaced by the modal verb 'may' [1]: this possibility could be quite remote [1].</li> <li>• The claim that studies have suggested that drinking milk 'may prevent weight gain' refers only to 'some studies' [1]: if there are only a very few such studies / if more studies suggest the opposite, then this claim is very weak [1].</li> </ul>	4

Question	Answer	Marks
1(d)	<p>2 marks for a correct answer with accurate explanation  1 mark for a correct answer with vague, incomplete or generic explanation  0 marks for a correct answer without explanation  0 marks for an incorrect answer with or without explanation</p> <p>2-mark answer (3 ticks)  Source D is an argument ✓. The first sentence is the conclusion ✓, which is supported by several reasons in the remainder of the source ✓.</p> <p>1-mark answers (2 ticks)  Source D is an argument ✓, because it includes a persuasive conclusion supported by reasons ✓.  Source D is an argument ✓. The first sentence is the conclusion ✓.</p> <p>0-mark answer (1 tick or 0 ticks)  Source D is an argument ✓, because it involves somebody making a case for something...<b>NGE</b></p>	<b>2</b>
1(e)	<p>1 mark each for up to two valid answers</p> <p><i>Examples of valid answers:</i></p> <ul style="list-style-type: none"> <li>• To reduce/reallocate public expenditure.</li> <li>• Because scientific/medical opinion no longer recommended giving milk to older children.</li> <li>• Because most children were no longer suffering from malnutrition / obesity had become a bigger problem than malnutrition.</li> <li>• Because there was less poverty, people could afford milk for themselves.</li> <li>• Because much of the milk was being wasted.</li> </ul>	<b>2</b>

Question	Answer		Marks										
2	<table border="1"> <tr> <td data-bbox="304 248 572 349"><b>Conclusion</b></td> <td data-bbox="572 248 1315 349">1 mark for an explicit supported conclusion <i>Cap at 7 if conclusion is absent or implicit</i></td> </tr> <tr> <td data-bbox="304 349 572 450"><b>Use of sources</b></td> <td data-bbox="572 349 1315 450">2 marks for use of at least 4 sources 1 mark for use of at least 1 source</td> </tr> <tr> <td data-bbox="304 450 572 580"><b>Evaluation of sources</b></td> <td data-bbox="572 450 1315 580">1 mark for each valid evaluation of the credibility or quality of reasoning in sources <i>Maximum 3 marks</i></td> </tr> <tr> <td data-bbox="304 580 572 710"><b>Inferential reasoning from sources</b></td> <td data-bbox="572 580 1315 710">1 mark each <i>Maximum 3 marks</i> <i>Source must be mentioned for this to be credited</i></td> </tr> <tr> <td data-bbox="304 710 572 810"><b>Personal thinking</b></td> <td data-bbox="572 710 1315 810">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 at least 4 sources 1 mark for use of at least 1 source	<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>	<b>8</b>
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<b>Annotate answers as follows:</b>													
<span style="border: 1px solid red; padding: 2px;"><b>CON</b></span> To indicate 'conclusion'. Use twice to indicate nuanced conclusion.													
<span style="border: 1px solid red; padding: 2px;"><b>S</b></span> To indicate creditworthy use of source.													
<span style="border: 1px solid red; padding: 2px;"><b>EVAL</b></span> To indicate creditworthy evaluation of source.													
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<span style="border: 1px solid red; padding: 2px;"><b>P</b></span> To indicate creditworthy personal thinking.													
<span style="border: 1px solid red; padding: 2px;"><b>C</b></span> To indicate that mark has been capped.													
<b>Indicative content</b>													
<ul style="list-style-type: none"> <li>• Source A shows that the claim is not true globally,</li> <li>• but may be true to some extent in some parts of the world / for some ethnic groups.</li> <li>• Source B is evidently addressed to a culture where lactose tolerance is the norm,</li> <li>• but recognises that some people in such cultures are lactose intolerant and the claim therefore does not apply to them.</li> <li>• Source C lists health benefits of milk, and thereby supports the claim,</li> <li>• but its reliability is distorted by vested interest to increase sales</li> <li>• and many of the alleged benefits are hypothetical.</li> <li>• Source D strongly opposes the claim, by identifying alleged health problems associated with milk,</li> <li>• but its reliability is reduced by bias against ill-treatment of animals.</li> <li>• Source E shows that in the 1940s milk was believed to be beneficial to children who may have been malnourished,</li> <li>• but thinking may have changed since then</li> <li>• and it does not necessarily follow that milk is good for everyone.</li> </ul>													

Question	Answer	Marks
2	<p><b>Example 8-mark answer (316 words)</b></p> <p><b>S</b> Source A explains why the majority of people worldwide are incapable of digesting milk. It follows that it would do more harm than good for most people globally to ‘drink a pint of milk a day’. This source is very <b>EVAL</b> reliable, because as a university text-book it is based on very good expertise and ability to see and the author has a strong professional vested interest to present correct information.</p> <p>The other sources appear to be addressed to a culture where lactose tolerance is the norm. <b>S</b> Source B recognises that some people in that culture are lactose intolerant and drinking milk will therefore not benefit them. Advice given in a website of this nature will almost certainly have been carefully <b>EVAL</b> vetted by medical experts.</p> <p><b>S</b> Source C lists health benefits of milk, and thereby supports the claim in relation to most people in the country to which it is addressed, but its reliability is distorted by the vested interest of the Association of Milk Producers to increase sales. Furthermore, many of the alleged benefits are claimed as possible rather than certain, and so the support for drinking a pint of milk a day is weak. <b>R</b></p> <p><b>S</b> Source D identifies health problems which may be associated with milk, albeit not necessarily for many people. Allowing for the <b>EVAL</b> bias of this source against the ill-treatment of animals, which some people claim is associated with milk production, it does not provide much of a basis for discouraging the consumption of milk. <b>R</b></p> <p><b>S</b> Source E shows that in the 1940s in the UK, milk was believed to be beneficial to children who may have been malnourished, but current <b>P</b> Government policy identifies obesity as a bigger problem in childhood: this may suggest that the consumption of milk by children over the age of 5 should not be encouraged. <b>CON</b></p> <p>Overall, therefore, I do not agree that everyone should drink a pint of milk a day.</p>	

Question	Answer	Marks
<p><b>In Q3, annotate as follows:</b></p> <p><b>AE</b> Significant additional element</p> <p><b>A</b> Significant omission</p> <p><b>P</b> Paraphrase</p> <p><i>In Q3(a), (c), and (d), if two answers are given, one of which is correct, award 1 mark.</i></p> <p><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></p>		
3(a)	<p><i>2 marks for an exact answer</i> <i>1 mark for a paraphrase, or for <b>one</b> additional element or omission</i></p> <p>It is (therefore) sometimes necessary for politicians to lie.</p>	<b>2</b>
3(b)	<p><i>For up to 2 of the following:</i> <i>2 marks for an exact answer</i> <i>1 mark for a paraphrase, or for <b>one</b> additional element or omission</i></p> <ul style="list-style-type: none"> <li>• (but) their behaviour [the behaviour of citizens in a democracy] shows that they actually want politicians to lie.</li> <li>• Many decisions which governments make must remain secret until they are announced in the correct way.</li> <li>• Politicians must do whatever it takes to conceal the truth if they are questioned about espionage.</li> </ul>	<b>4</b>
3(c)	<p><i>2 marks for an exact version of any of the following:</i> <i>1 mark for a paraphrase of any of the following, or for <b>one</b> additional element or omission</i></p> <ul style="list-style-type: none"> <li>• (Citizens in a democracy often claim that) the quality they look for most in politicians is truthfulness.</li> <li>• (It is sometimes suggested that) politicians who are asked for information which they cannot reveal should refuse to answer.</li> <li>• (Anyone who imagines that) politicians can always tell the truth.</li> </ul>	<b>2</b>
3(d)	<p><i>2 marks for an exact version of either of the following</i> <i>1 mark for an incomplete or vague version of either of the following</i></p> <ul style="list-style-type: none"> <li>• It is necessary/desirable for politicians to obtain popular support before waging war.</li> <li>• Obtaining popular support for a declaration of war is more important than telling the truth.</li> <li>• Self-defence is the only worthy motive for declaring war.</li> </ul>	<b>2</b>



Question	Answer	Marks
4(a)	<ul style="list-style-type: none"> <li>• The claim relies exclusively and entirely on a single example [1], which is hypothetical [1], too extreme to be plausible [1] and simply asserted without support from any reasoning or evidence [1]. In technical terminology, this is a rash generalisation [1] based on a straw man [1].</li> <li>• The argument relies on conflation [1] between tolerating dishonesty (in the example) [1] and wanting politicians to lie [1].</li> </ul>	<b>3</b>
4(b)	<p>The generalisation is not sweeping (or rash) [1]. The reasoning/conclusion is not significantly weakened [1], because although* there may be a few exceptions to the generalised claim in the first clause [1], the reasoning remains valid if only some nations engage in espionage [1].</p> <p><i>*Award this mark <b>only</b> if 'although' or the equivalent is stated.</i></p>	<b>2</b>
4(c)	<p>Significantly (but not fatally) [1]. The fact that other political leaders have lied with less justification [1] does not justify the person being criticised [1]. However, the remainder of the paragraph gives a reason to support the implied claim that politicians have to lie 'in order to justify entering a war' [1].</p> <p><i>No judgment mark without support.</i></p>	<b>3</b>
4(d)	<p>The second sentence is a <i>personal attack (ad hominem)</i> [1]. The conclusion is unsupported [1].</p>	<b>2</b>

Question	Answer	Marks								
5	<table border="1" data-bbox="320 248 1310 786"> <tr> <td data-bbox="320 248 512 349"><b>Reasons</b></td> <td data-bbox="512 248 1310 349">2 marks for three or more reasons supporting conclusions 1 mark for one or two reasons supporting conclusions</td> </tr> <tr> <td data-bbox="320 349 512 521"><b>Inferential reasoning</b></td> <td data-bbox="512 349 1310 521">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> <i>Maximum 3 marks</i></td> </tr> <tr> <td data-bbox="320 521 512 719"><b>Argument elements</b></td> <td data-bbox="512 521 1310 719">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> <i>Maximum 3 marks</i></td> </tr> <tr> <td data-bbox="320 719 512 786"><b>Structure</b></td> <td data-bbox="512 719 1310 786">1 mark for two or more distinct strands of reasoning</td> </tr> </table> <p data-bbox="304 819 1310 920"><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 data-bbox="304 954 1310 1055"><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 data-bbox="304 1088 1246 1155"><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 data-bbox="304 1189 719 1223"><b>Annotate answers as follows:</b></p> <p data-bbox="304 1256 807 1290"><b>CON</b> To indicate main conclusion.</p> <p data-bbox="304 1323 1238 1357"><b>R</b> To indicate creditworthy reason used to support a conclusion.</p> <p data-bbox="304 1391 1070 1424"><b>I</b> To indicate creditworthy intermediate conclusion.</p> <p data-bbox="304 1458 1078 1491"><b>AE</b> To indicate creditworthy other argument element.</p> <p data-bbox="304 1525 951 1559"><b>S</b> To indicate distinct strand of reasoning.</p> <p data-bbox="304 1592 951 1626"><b>C</b> To indicate that mark has been capped.</p> <p data-bbox="304 1659 1310 1727"><b>SEEN</b> When a type of argument element has already been credited in the same strand of reasoning.</p> <p data-bbox="304 1760 1302 1827"><b>X</b> To indicate material that is judged not to have a structural function the argument.</p> <p data-bbox="304 1861 1302 1928">Use <b>highlighter</b> to indicate material which is not relevant to the stated claim or is reproduced from the passage.</p>	<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> <i>Maximum 3 marks</i>	<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> <i>Maximum 3 marks</i>	<b>Structure</b>	1 mark for two or more distinct strands of reasoning	8
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5	<p><b>Example 8-mark answers</b></p> <p><i>Support (168 words)</i></p> <p><b>AE</b> If you discover that someone has lied to you on one occasion, then you will never be able to trust anything they tell you in the future. This creates serious problems, because everyone needs to know that they can trust certain information which is given to them. Lying is especially problematic within personal relationships, because it is dangerous to entrust yourself to someone who might be deceiving you. Attempting to navigate life and relationships without fixed points is like trying to plot a journey using a compass which does not consistently point North.</p> <p><b>S</b> Making decisions and taking actions on the basis of false information is likely to lead to disastrous consequences. For example, a man might assure his girlfriend that a new dress suits her even though it really doesn't; she will become very embarrassed if she wears the dress and subsequently discovers the truth. It is always better in the long run to tell the truth.</p> <p><b>CON</b> Therefore it is always wrong to tell lies in personal relationships.</p> <p><i>Challenge (153 words)</i></p> <p><b>R</b> Discouraging words are harmful, even when they are true. If parents are always scrupulously honest about the academic, sporting or musical performance of their children, those children will gradually become disheartened and never reach their potential. Since it is better to be kind than to be truthful, people in positions of authority, such as parents and teachers, should always tell children what will encourage them most, whether it is true or not.</p> <p><b>S</b> Some people claim they would never deceive their spouse or partner, but 'white lies' are told for good motives, such as in order to prevent a pleasant surprise from becoming known in advance, and they are therefore morally quite acceptable. Many people also need constant reassurance about how others see them, and so their spouse or partner should give them that reassurance, even if it is not literally true.</p>	

Question	Answer	Marks
5	<p data-bbox="485 264 549 293"><b>CON</b></p> <p data-bbox="308 302 1187 331">Therefore it is not always wrong to tell lies in personal relationships.</p> <p data-bbox="308 387 762 416"><i>Acceptable 'challenge' conclusions</i></p> <ul data-bbox="308 423 1110 521" style="list-style-type: none"><li data-bbox="308 423 1110 452">• It is not always wrong to tell lies in personal relationships.</li><li data-bbox="308 459 1110 488">• It is sometimes right to tell lies in personal relationships.</li><li data-bbox="308 495 1110 521">• It can be right to tell lies in personal relationships.</li></ul>	