

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

## THINKING SKILLS

Paper 2 Critical Thinking MARK SCHEME Maximum Mark: 50 9694/22 October/November 2021

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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.

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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.

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

<ul> <li>Image: A start of the start of</li></ul>	In Qs 1, 3 and 4 use to indicate where marks have been awarded.
×	Use to indicate an answer or element that is wrong.
NGE	Not good enough. Use wherever such a judgement has been made.
BOD	Benefit of doubt.
AE	In Q5 use to indicate creditworthy other argument element. In Q3 use to indicate 'significant additional element'.
CON	In Qs 2 and 5 use to indicate 'conclusion'.
C	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.
EVAL	In Q2 use to indicate creditworthy evaluation of a source.
I	In Q5 use to indicate creditworthy intermediate conclusion.
Р	In Q2 use to indicate creditworthy personal thinking. In Q3 use to indicate paraphrase.
R	In Q2 use to indicate creditworthy inferential reasoning. In Q5 use to indicate creditworthy reason used to support a conclusion.
5	In Q2 use to indicate creditworthy use of a source. In Q5 use to indicate distinct strand of reasoning.
<b>^</b>	In appropriate cases, use to indicate significant omission. In Q3 use to indicate 'significant omission'.
SEEN	Use in answers when no other annotations have been used. Use on blank pages.
Highlight	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)(i)	Source A mentions a study showing that statins reduce the risk of stroke for everyone over the age of 65 <b>[1]</b> . Source A mentions that fatty deposits build up over time, so older people will be at higher risk <b>[1]</b> .	2
1(a)(ii)	Younger people with a higher risk of developing cardiovascular disease (e.g. those with a strong family history) would be denied this medicine <b>[1]</b> . It is likely to be an inefficient use of resources to prescribe statins to those over 65 who have neither too much bad cholesterol nor an otherwise elevated risk of cardiovascular disease <b>[1]</b> . <i>Allow for one mark</i> It only mentions benefits as regards strokes.	2
1(b)	It is from an expert source / a source with ability to see as he has been in a high position in a drugs company [1] and it seems to be a case of 'reverse vested interest' as he is putting drug companies in a negative light [1]. Because he has left the company, he can speak freely and no longer has to adhere to company policy [1]. However, as Chief Financial Officer there are doubts about the relevance of his expertise to medical issues [1]. As a former employee, he may have some bias against his former employers [1]. On balance the source is neither very reliable nor completely unreliable [1] as the features that make the source unreliable, if true, would negate the features that make it reliable [1].	4
	Maximum 3 marks if only one side considered. Allow any judgement that falls between very reliable and very/completely unreliable e.g. fairly reliable if points made for both sides	
1(c)	Not much/not at all <b>[1]</b> as we can infer from the evidence in other sources that statins are an example of the sort of preventive prescription of medication that the author is objecting to/the other conditions are also cardiovascular conditions that statins are designed to treat. <b>[1]</b> therefore the point made applies to them <b>[1]</b> . The evidence may be weak in other ways but this particular point does not weaken it <b>[1]</b> . It is possible that statins could be an example of a drug necessary to maintain life but it seems unlikely given the evidence in the other sources <b>[1]</b> . High blood pressure is explicitly only an example to illustrate the argument <b>[1]</b> .	3

Answer	Marks
<ul> <li>Award marks from any one of the following:</li> <li>Health services provided and funded by the state are financed through taxes [1]. These taxes are paid by individuals [1]. Therefore it is in their interests to back policies which reduce expenditure on health care [1].</li> <li>The state does not have limitless resources to spend on health care [1]. As treatments become more expensive, the probability of health care being rationed because of a lack of resources increases [1]. The individual may find themselves not receiving care they need because of such a rationing policy [1]. Therefore it is in their interests to reduce unnecessary health care expenditure [1].</li> <li>Whilst the risk is low, an individual could be one of the four who would have developed cardiovascular disease [1]. There is no way of knowing if this is the case. [1] The policy therefore acts like any insurance policy in</li> </ul>	3
-	<ul> <li>Award marks from any one of the following:</li> <li>Health services provided and funded by the state are financed through taxes [1]. These taxes are paid by individuals [1]. Therefore it is in their interests to back policies which reduce expenditure on health care [1].</li> <li>The state does not have limitless resources to spend on health care [1]. As treatments become more expensive, the probability of health care being rationed because of a lack of resources increases [1]. The individual may find themselves not receiving care they need because of such a rationing policy [1]. Therefore it is in their interests to reduce unnecessary health care expenditure [1].</li> <li>Whilst the risk is low, an individual could be one of the four who would have developed cardiovascular disease [1]. There is no way of knowing if</li> </ul>

Question		Answer	Marks
2	Conclusion	1 mark for an explicit supported conclusion Cap at 7 if conclusion is absent or implicit	8
	Use of sourc	es 2 marks for use of 3 or more sources 1 mark for use of at least 1 source	
	Evaluation of sources	1 mark for each valid evaluation of the credibility or quality of reasoning in sources <i>Maximum 3 marks</i>	
	Inferential reasoning fro sources	1 mark each Maximum 3 marks Source must be mentioned for this to be credited.	
	Personal thinking	1 mark each <i>Maximum 2 marks</i>	
	Annotate answ	vers as follows:	
	5	licate 'conclusion'. licate creditworthy use of source.	
	EVAL	dicate creditworthy evaluation of source.	
		dicate creditworthy inferential reasoning.	
	To inc	dicate creditworthy personal thinking.	
	To inc	licate that mark has been capped.	

Question	Answer	Marks
2	Indicative content	
	<ul> <li>Source A suggests statins reduce the risk of CVD in a number of cases.</li> <li>It has high credibility as it is an information leaflet from a state health service.</li> <li>However, it does not explore any possible disadvantages of taking the</li> </ul>	
	<ul> <li>drug.</li> <li>Source B suggests there is overprescribing of medicines,</li> <li>although it does not specifically refer to statins we can infer that statins are an example of the sort of drug which is being overprescribed.</li> </ul>	
	<ul> <li>It is from a seemingly credible source;</li> <li>However, there is more information we need to know about the source before we can be sure of its credibility.</li> </ul>	
	<ul> <li>Source C suggests that the risk of developing side effects as a result of taking statins is higher than the risk of developing CVD if one does not take them.</li> </ul>	
	<ul> <li>However, these risks are arguably relatively minor and may be psychosomatic.</li> </ul>	
	• Source D suggests there may be a conflict of interest between health services and individuals as to whether statins should be widely prescribed.	
	However, this conflict of interest may be resolvable.	

Question	Answer	Marks
In Q3, ann	otate as follows:	
Sig	nificant additional element	
Sigi	nificant omission	
Par Par	aphrase	
In <b>Q3(a)</b> , <b>(</b>	<b>c) and (d)</b> , if two answers are given, one of which is correct, award 1 mark.	
	of <b>Q3</b> , apply guidance relating to additional material <b>only</b> if it constitutes an addit answer or an alternative answer.	ional
3(a)	2 marks for an exact answer 1 mark for a paraphrase, or for <b>one</b> additional element or omission	2
	Guided tours should be banned.	
3(b)	For up to 3 of the following: 2 marks for an exact answer 1 mark for a paraphrase, or for <b>one</b> additional element or omission	6
	<ul> <li>(so) guided tours have a negative impact of the residents of such cities.</li> <li>The guided tour is an unnecessary nuisance.</li> <li>Banning guided tours would support attempts to improve working conditions.</li> </ul>	
	<ul> <li>such guides are a major contributor to the problems of visitor numbers that tourist destinations are experiencing.</li> <li>However, those seeking such information would be better off going to a</li> </ul>	
3(c)	series of lectures. 2 marks each for an exact version of up to 2 of the following 1 mark each for an incomplete or vague version of up to 2 of the following	4
	<ul> <li>Tour guides are not informed professionals</li> <li>Informed professionals are not boring / do not drone on</li> <li>Such lectures are available</li> <li>Such lectures will be given by an informed professional</li> </ul>	
3(d)	Example <b>[1]</b> of the residents of a city (popular with tourists) having fled <b>[1]</b> . 1 mark for 'evidence of the residents of a city (popular with tourists) having fled'.	2

Question	Answer	Marks
4(a)	The author assumes that the number of tourist guides is a causal factor in creating the number of tourists <b>[1]</b> . It seems far more likely that they are an effect of this phenomenon / possible that there is no causal relationship <b>[1]</b> . The author has therefore reversed the cause–effect relationship / assumed there is a cause–effect relationship between the two variables <b>[1]</b> . <i>0 marks for just 'confuses cause and correlation'.</i>	2
4(b)	<ul> <li>For up to 2 of the following: 2 marks for a valid answer, clearly expressed; 1 mark for a weak attempt at a valid answer.</li> <li>Paragraph 1 <ul> <li>Is inconsistent in that it refers to overcrowding caused by the resident population as a problem and then implies that the depopulation of Venice is problematic.</li> <li>Is weakened by the causal flaw of assuming that the depopulation of Venice was caused by the presence of large numbers of tourists.</li> </ul> </li> <li>Paragraph 2 <ul> <li>Allow for 1 mark: It is inconsistent to say that people should find their own way around and then to say that they can ask for directions if they get lost.</li> </ul> </li> <li>Paragraph 3 <ul> <li>Offers weak support for the IC, as depriving students of their jobs as tour guides by banning guided tours would undermine rather than support attempts to improve working conditions.</li> <li>Relies on the questionable assumption that an economy can generate an unlimited supply of well-paid jobs.</li> </ul> </li> </ul>	4

Question		Answer	Marks
5	Reasons	2 marks for three or more reasons supporting conclusions 1 mark for one or two reasons supporting conclusions	8
	Inferential reasoning	1 mark for each use of an intermediate conclusion or chain of intermediate conclusions <i>(including if used as a response to a counter)</i> <i>Maximum 3 marks</i>	
	Argument elements	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>	
	Structure	1 mark for two or more distinct strands of reasoning	
	is more than on total mark. Maximum 6 ma does not follow resolution. 0 marks for ans No credit for ma	nt of a candidate response may score only once. Where there e possibility, use the classification which leads to the higher rks for no conclusion or wrong conclusion, or a conclusion that from the reasoning, or if both sides are argued without a wer unrelated to the claim given. aterial merely reproduced from the passage.	
	CON To ind	dicate main conclusion.	
	R To inc	dicate creditworthy reason used to support a conclusion.	
		dicate creditworthy intermediate conclusion.	
		dicate creditworthy other argument element.	
		dicate distinct strand of reasoning.	
	To ind	dicate that mark has been capped.	
		dicate material that is judged not to have a structural function argument.	
	Use <b>highlighte</b>	$m{r}$ to indicate material which is not relevant to the stated claim.	

Question	Answer	Marks
5	Example 8-mark answers	
	Support (133 words)	
	A sound historical perspective is an essential feature of the well-rounded educated person. This is why the study of history is on the curriculum of education systems throughout the world. Whilst historical facts and arguments can be gleaned through reading, the emotional impact of history is best generated through visiting places where historical events actually took place for example the dropping of the first atom bomb on Hiroshima. So, such visits should be regarded as an aspect of the education system and not just mindless tourism.	
	Whilst visitor numbers to such historic places may be a problem, this problem can be managed for example by limiting the number of times somebody can visit an historic site. So it is a problem with a solution.	
	So people should be encouraged to visit historic places.	
	Challenge (139 words)	
	If we encourage people to visit historic places this will encourage people to travel. In a world where urgent action is needed to combat the global warming crisis, we should be discouraging rather than encouraging travel. So it is irresponsible to encourage people to behave in this way.	
	Whilst there are educational advantages to being able to visit historic places, modern substitutes such as film and television programmes can give people a sense of the place without there needing to travel to it. Further technological developments such as virtual reality will mean that people will be fully immersed in the experience of the place. This will mean that, in terms of their perception, they will not be able to distinguish between the virtual reality experience and actually being there	
	So people should not be encouraged to visit historic places.	
	<ul> <li>Acceptable 'challenge' conclusions:</li> <li>People should not be encouraged to visit historic places.</li> <li>People should be encouraged not to visit historic places.</li> <li>People should be discouraged from visiting historic places.</li> </ul>	