

Cambridge International AS & A Level

THINKING SKILLS

Paper 2 Critical Thinking

October/November 2022

MARK SCHEME

Maximum Mark: 50



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 2022 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

This document consists of 12 printed pages.

© UCLES 2022 [Turn over

Cambridge International AS & A Level – Mark Scheme 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 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.

© UCLES 2022 Page 2 of 12

ANNOTATIONS

4	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 judgment 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'.
Е	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.
^	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)	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	2
	2-mark answer Source A is not an argument ✓. It provides reasoning which would support a conclusion that wolves should be reintroduced into Scotland ✓, but this conclusion is not stated ✓. or	
	Source A is not an argument ✓. It contains information about the proposal to reintroduce wolves to Scotland ✓. There is no (supported, persuasive) conclusion stated ✓.	
	1-mark answers Source A is not an argument ✓, because it does not include a (supported, persuasive) conclusion ✓. Source A is not an argument ✓. It merely contains information ✓.	
	0-mark answer Source A is not an argument ✓. It does not contain two opposing points of view.	
1(b)	There is only some support provided (neither full support nor none) [1]. Source C does show that quite a lot of sheep were killed by wolves [1], but we can't interpret the significance of this number without knowing the total number of sheep in Norway [1]. It says that the farmers received compensation, which suggests that this would be likely to happen in Scotland too [1], but there is no indication of how satisfactory this compensation is likely to be [1]. It does suggest that the presence of wolves might be driving farmers out of the business [1], and the same could plausibly happen in Scotland [1]. However, there may be significant differences between the two countries [1] – for example, if the wolves in Norway are not confined to fenced-off areas, and/or little sheep farming were to take place within the Scottish fenced-off areas [1].	4
	Cap at 3 marks if only one side given. Credit judgment only if both sides are supported.	

© UCLES 2022 Page 4 of 12

Question	Answer	Marks
1(c)	 Up to 2 marks from the following Although on the face of it a fence would reduce the absolute level of access [1], how significant this was would depend on how many gates there were [1], where they were located [1], and what the current pattern of access is [1]. Up to 2 marks each for an explanation of how one (or more) of these factors could significantly reduce or not reduce the level of access, for example: Walkers might have to travel a long way to enter the area [1] and walking routes would be limited by needing to begin and end at a gate [1]. If the vast majority enter the area from a limited number of starting points, then a few gates in strategic places would allow a similar level of access [1]; but if many walkers roam freely across all parts of the boundary, then there would need to be many gates at close intervals in order to avoid a significant reduction in the level of access [1]. 	4
	No mark for judgment.	
1(d)	Source E has some credibility (neither completely credible nor completely devoid of credibility) [1]. The author clearly has expertise / experience in the general area of sheep-farming [1], and he has the ability to see the damage caused by red deer [1]. However, he probably does not have any expertise in the wider issues associated with reintroduction of species [1]. Given his occupation, he is biased against recognising any of the potential benefits of reintroducing wolves [1], focusing only on the potential problems [1]. The suggestion that wolves would pose a threat to sheep is plausible [1], and the author offers a plausible alternative for the problem of controlling deer populations, namely, using professional marksmen to shoot them [1]. Cap at 3 marks if only one side given. Credit judgment only if both sides are supported.	4

Question	5	Answer	Marks
2	Conclusion	1 mark for an explicit supported conclusion Cap at 7 if conclusion is absent or implicit	8
	Use of sources	2 marks for use of 4 or 5 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 Maximum 3 marks	
	Inferential reasoning from sources	1 mark each Maximum 3 marks	
	Personal thinking	1 mark each Maximum 2 marks	
	Annotate answers	s as follows:	
	CON To indicate	'conclusion'.	
	5 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.	
	To indicate	that mark has been capped.	
	Indicative conten	t	
		s the background to the proposal and the rationale, that help control the deer population.	
	 Source B prov 	ides some more, research-based, information on the	
		nlighting the safety and public acceptability advantages of	
	Source C uses	as where wolves are to be reintroduced. s recent data from Norway to support the claim that wolves	
		sheep farmers, oesn't provide quite as much support as intended.	
	 Source D appr 	roaches the issue from the (vested interest) perspective of	
		objection focussing on the 'right to roam' enshrined in	
	Scottish law.Source E disp	lays the view of a hill farmer who sees the potential	
	reintroduction	of wolves as a threat to his industry. ise in sheep-farming,	

© UCLES 2022 Page 6 of 12

Question	Answer	Marks
2	 but his letter is cast in emotive language based on bias against reintroducing wolves. However, he offers a possible alternative solution to problems posed byred deer, i.e., using marksmen rather than wolves to limit numbers. In general, the environmental and ecological advantages are highlighted by Sources A and B, while the other three sources raise questions that need to be addressed if public opinion is to swing behind the proposal. Example 8-mark answer 230 words Sources A and B agree that reintroducing wolves to Scotland would aid regeneration of woodlands. Source A explains how herds of red deer overgraze tree-seedlings, and how this could be prevented if wolves were present to keep herds of deer more mobile. By comparing the density of deer in affected areas to the density of wolves needed to achieve the desired aim, source B – extracted from a university website and likely to be based on expertise in the topic – shows that a relatively low number would be needed. However, Source C refers to a recent study conducted in Norway showing how wolves can cause heavy losses to sheep farmers. Clearly, when wolves are present in an area, their predation is not limited to one species. The concerns expressed in this source are emphasised strongly by Source E, the author of which clearly has expertise in sheep farming, and who states clearly the proposal's possible implications for his industry. Proposals to confine the wolves to fenced-off areas have also met with opposition from recreational walkers, as described in Source D, although such walkers clearly have a leval vested interest to oppose anything that reduces their unrestricted access to the countryside. 	Marks
	should have due consideration given to their views. This has yet to happen. CON At present, wolves should not be reintroduced to Scotland.	

© UCLES 2022 Page 7 of 12

Question	Answer		
In Q3, annotate as follows:			
Sig. P Par	nificant additional element nificant omission aphrase c) and (d), if two answers are given, one of which is correct, award 1 mark.		
-	of Q3 , apply guidance relating to additional material only if it constitutes an addit answer or an alternative answer.	tional	
3(a)	2 marks for an exact answer 1 mark for a paraphrase, or for one additional element or omission	2	
3(b)	(However,) people should be discouraged from keeping exotic pets. For up to 2 of the following: 2 marks for an exact answer 1 mark for a paraphrase, or for one additional element or omission If more than two answers given, mark the first three only	4	
	 People very often underestimate the risks posed by exotic pets. (so) this poor treatment is clearly viewed as a serious problem by the international community (and) action should be taken. The people who buy animals obtained in this way should be held responsible for the suffering these animals endure. 		
	1 mark if second and third ICs given together as one		
3(c)	A reason [1] supporting the intermediate conclusion 'it is not surprising that animals' needs are often neglected.' [1].	2	
	Allow supporting the claim that 'people should be discouraged from keeping exotic pets.' [1].		
3(d)	 2 marks for an exact version of any of the following 1 mark for an incomplete or vague version of any of the following That there wasn't some other reason why these countries signed the agreement other than that they view the issue as a serious problem. If something is viewed as a serious problem by the international community, then action should be taken. Responsibility for the suffering endured by seized animals does not lie solely with the people seizing and smuggling the animals. Purchasing something makes the buyer (at least partly) responsible for any harm done by the way in which it is procured. It is possible to ascertain how any particular pet was obtained. 	2	

© UCLES 2022 Page 8 of 12

Question	Answer	Marks
4(a)	There is a causal flaw (<i>cum/post hoc</i>) present [1]. The claim is made that rising levels of publicity on social media websites about exotic pets and the greater ease of buying them via e-commerce, both of which coincided with (or preceded) the increased popularity of keeping exotic pets, must have caused the increase [1]. However, the rise could have been caused by different factors / there is no evidence of a causal relationship [1].	3
4(b)	2 marks for a clearly expressed objection. 1 mark for a vague or incomplete objection.	2
	For example: The claim made about the risks posed to people by exotic pets could just as easily be made about more common pets. Every year, many people are 'scratched or bitten' by non-exotic pets (e.g., cats and dogs). OR It is not stated that all exotic pets are dangerous, so it may be safe to keep some species.	
4(c)	The number of countries cited as having signed the agreement is an appeal to popularity [1]. It is a relevant appeal, because it does support the author's conclusion that the issue is viewed as a serious problem by the international community [1]. OR The fact this is an international agreement (presumably signed by senior government figures across the world) is an appeal to authority [1]. It is a relevant appeal because governments have the right to make such a decision, and their widespread endorsement of this agreement supports the author's conclusion that action should be taken [1]. OR The language used to describe the sufferings of smuggled animals is an appeal to emotion (pity) [1]. It is a relevant appeal because animal suffering is a morally relevant issue [1].	2
4(d)	 Award up to 3 marks from any of the following: There is a rash generalisation [1] from two examples to 'many species' [1]. The argument follows a slippery slope [1], from two examples of declining species to 'devastating effects on the planet's ecosystems' [1]. A dramatic decline in population does not necessarily mean that a species is on the path to extinction [1]. It may even be necessary in some cases for the general health of the population [1]. The number of species is conflated with the planet's ecosystems [1]. We don't know if the two examples of decline given were caused by the seizing of wild animals for the exotic pet trade [1], so there is inadequate support for the conclusion in the last sentence [1]. 	3

© UCLES 2022 Page 9 of 12

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 (including if used in a response to a counter) Maximum 3 marks		
	Argument elements	1 mark for each use of other argument elements that strengthens the reasoning: counter with response, example, evidence, analogy, hypothetical reasoning Credit each type only once per strand of reasoning Maximum 3 marks		
	Structure	1 mark for two or more distinct strands of reasoning		
	is more than total mark. Maximum 6 rdoes not folloresolution. 0 marks for a	ment of a candidate response may score only once. Where there one possibility, use the classification which leads to the higher marks for no conclusion or wrong conclusion, or a conclusion that ow from the reasoning, or if both sides are argued without a suspense unrelated to the claim given. Inswer unrelated to the claim given. Inswer and a candidate response may score only once. Where there is a conclusion which leads to the higher and the same argued without a conclusion or wrong conclusion, or a conclusion that higher are argued without a conclusion or wrong conclusion, or a conclusion that higher are argued without a conclusion or wrong conclusion, or a conclusion that higher are argued without a conclusion or wrong conclusion, or a conclusion that higher are argued without a conclusion or wrong conclusion, or a conclusion that higher are argued without a conclusion that higher are		
	Annotate an	swers as follows:		
	To indicate main conclusion.			
	R To inc	dicate creditworthy reason used to support a conclusion.		
	I To inc	dicate creditworthy intermediate conclusion.		
	AE To inc	dicate creditworthy other argument element.		
	5 To inc	dicate second distinct strand of reasoning.		
	To inc	dicate that mark has been capped.		

© UCLES 2022 Page 10 of 12

Example 8-mark answers Support (155 words) R Every year, people are injured by family pets, for example, scratched by cats	
R	
R Every year, people are injured by family note for example, coratehod by eate	
every year, people are injured by family pers, for example, scratched by cars	
or bitten by dogs. So there is a risk – not only to family members, but also to	
other members of the public – that could be managed better. At present,	
except for prosecutions of owners for serious injuries caused by dangerous	
i i i	
neir animais benave.	
f they will not voluntarily accept this responsibility, then the law must force	
nem to do it. Just as the introduction of mandatory speed limits (and penalties	
or breaking these) forced motorists to slow down, it follows that pet owners'	
eluctance to control how their animals behave would justify legislating for this	
o be compelled.	
Pet owners should be legally responsible for all of the damage or harm	
aused by their animals.	
Challenge (138 words)	
Pet owners should not be legally responsible for all of the damage or harm	
aused by their animals.	
Vith few exceptions – for instance, keeping dogs on leads when outside – it is	
inrealistic for owners to be expected to determine how their pets behave, so it	
would be unfair to penalise them for harm or damage caused by their animals.	
AE High-profile cases of major injury understandably result in public calls for	
ction; however, tougher legislation is unnecessary, because incidences of	
erious injury caused by pets are very rare indeed. Most injuries are fairly	
ninor.	
	bitten by dogs. So there is a risk – not only to family members, but also to the members of the public – that could be managed better. At present, accept for prosecutions of owners for serious injuries caused by dangerous ogs, pet owners have little incentive to address this problem; hence, there is need to inculcate more of a sense of responsibility among them for how eir animals behave. They will not voluntarily accept this responsibility, then the law must force em to do it. Just as the introduction of mandatory speed limits (and penalties responsibility that pet owners' ductance to control how their animals behave would justify legislating for this be compelled. The towners should be legally responsible for all of the damage or harm aused by their animals. The legislation of the damage or harm aused by their animals. The few exceptions – for instance, keeping dogs on leads when outside – it is inrealistic for owners to be expected to determine how their pets behave, so it out to be unfair to penalise them for harm or damage caused by their animals. The few exceptions of major injury understandably result in public calls for other injury caused by pets are very rare indeed. Most injuries are fairly

Question	Answer	Marks
5	Experts accept that keeping animals can often be beneficial to lonely or elderly people. Introducing legal responsibility for the actions of these animals would inevitably discourage people from being pet owners, hence the benefits to vulnerable adults of keeping pets would not be fully realised. **Acceptable 'challenge' conclusions:* Pet owners should not be legally responsible for all of the damage or harm caused by their animals. Pet owners should only be legally responsible for some of the damage or harm caused by their animals. Pet owners should not be legally responsible for any of the damage or harm caused by their animals.	

Page 12 of 12