Critical Thinking

Advanced Subsidiary GCE

Unit **F501**: Introduction to Critical Thinking

Mark Scheme for January 2012

Annotations

Annotation	Meaning
✔	Use a ✓ to indicate the separate marks given in **Q1(b), Q2(a), Q2(b),Q6, Q7,Q8, Q9(a) and Q9(b)**
	Use the following annotations in Q10:
C ✚	to indicate strong credibility
C	to indicate weak credibility
P ✚	to indicate strong plausibility
P	to indicate weak plausibility
SEEN	at the **bottom** of **pages 10 and 11** and **any additional pages** to indicate that these continuation sheets have been looked at

Question 1

Credit 3 marks
for precisely stating the argument element in the exact words of the author.
You must only credit the words written; ellipses (….) should not be credited.
The words in brackets are not required, but candidates should not be penalised if these words are included.

Credit 2 marks and 1 mark
For answers to all parts of question 1, you should refer to the guidance given as to how to credit partial performance marks.

Credit 1 mark for gist

0 marks
for a statement of an incorrect part of the text.

NB   If a candidate uses brackets, mark what is in the brackets as part of the answer.
NB   If the candidate uses an introduction followed by an answer in quotation marks, eg *The reason is "xxx"*, mark what is within the quotation
         marks and ignore the introductory phrase.

	Question		Answer	Marks	Guidance
1	(a)		**Conclusion:** A compulsory micro-chipping scheme for dogs should be adopted as the preferred option to deal with problems of identification.	3	**Credit 2 marks for slight omission** eg leaving out *"compulsory"* or *"for dogs"*. **Credit 1 mark for significant omission** *"the preferred option"* or *"to deal with problems of identification"*. **OR for an addition** *"He argued forcibly that"*. NB accept *"that"* on its own.

Question		Answer	Marks	Guidance
(b)		**2 reasons:** • Compulsory micro-chipping would provide a lifetime of security for a one-off payment • It would (also) have a positive welfare impact • This (a dog licensing scheme) would potentially create unnecessary bureaucracy and expense for local authorities *(NB bureaucracy/expense linked as one reason)* • The introduction of compulsory micro-chipping would not represent a financial barrier to dog ownership for vulnerable groups.	2x3	*** Use ticks ✓ to identify where marks are awarded in the candidate's answer.** **Credit 2 marks for omission** eg leaving out *"compulsory"* or *"positive"* or *"welfare"* or *"unnecessary"* or *"local"* or *"financial"* or *"for vulnerable groups".* **Credit 1 mark for addition** eg including *"returning lost dogs to their owners"* or *"improved tracing of hereditary health problems in dogs"* or *"the MP responded that"* or *"On the other hand, he added that".*
(c)		**1 example:** • (including) returning lost dogs to their owners • (and) improved tracing of hereditary health problems in dogs.	3	**Credit 2 marks for an example with omission** eg leaving out *"lost"* or *"to their owner*s" eg leaving out *"improved"* or *"in dogs".* **Credit 1 mark** For stating the two examples together as one **OR for additional material**, eg *"it would provide".* **Credit 0 marks** For the list of charities congratulated.
(d)		**Counter-assertion:** (Whilst the RSPCA claimed that) their popular proposal for a dog licensing scheme would be a better alternative to micro-chipping.	3	**Credit 2 marks for omission** eg leaving out *"their popular proposal for"* and/or *"to micro-chipping".* Credit 1 mark for addition eg *"the MP responded …".* **Credit 0 marks** For *"On the other hand …".*

Question			Answer	Marks	Guidance
2	(a)		**Argument element:** **2 marks** Counter-assertion/counter-claim **OR** an assertion/claim that is countered/dismissed.	2	*** Use ticks ✓ to identify where marks are awarded in the candidate's answer.** **1 mark** Accept *"counter"* as part of answer, eg *counter*-argument. **0 marks** For no credit-worthy material. *** Popular error** *"reason".* **Credit 0 marks**
	(b)		**Element explanation:** **2 marks** One mark for explaining each part of the argument element: eg A *statement/claim* [1] that goes against/counters what is being argued [1]. eg A *statement/claim* [1] that the person argues against/counters [1].	2	*** Use ticks ✓ to identify where marks are awarded in the candidate's answer.** **1 mark** **EITHER** a reference to *opposing* or *going against* **OR** a reference to *an unsupported claim/no reasons.* **0 marks** For no credit-worthy material. *** 2(a) and 2(b) should be marked independently** ie if 2(a) is incorrect, marks can be awarded for a correct answer to 2(b). * A definition style answer is all that is required. However if a candidate explains the element correctly via the text, this should be credited 2 marks.

Question			Answer	Marks	Guidance
3	(a)		**Evidence RSPCA survey – strength** **2 marks** For a correct assessment which is explained and includes **any 2 of the following:** • **A: Appropriateness of the group surveyed** • **M: Majority of those surveyed agreed** • **C: Credibility of the RSPCA** eg Two thirds, which is a *large amount* (M), agreed with the introduction of the dog licence and *dog owners answered, so this is the appropriate group* (A). **OR** **Any 1 of the above** which is **developed**. eg Dog owners supported the introduction of the dog licence and as they are the group that would be affected by it, this evidence strongly supports its introduction.	2	**1 mark** For a correct assessment that **makes a statement about any 1 of the following:** • **A: Appropriateness of the group surveyed** • **M: Majority of those surveyed agreed** • **C: Credibility of the RSPCA** eg *The RSPCA is a well-known organisation who would probably not misrepresent the evidence* (C). **0 marks** For no credit-worthy material. *** Popular error** Explanation of a weakness.　　　　**Credit 0 marks**
	(b)	(i)	**Evidence 11% increase – explanation** **2 marks** For a plausible **explanation**, eg The sudden rise could have been due to the dog wardens being more efficient, because the police had the pressures of many other jobs to do, as well as dealing with stray dogs. eg The police are no longer responsible for picking up stray dogs so people are more casual about abandoning their dogs on the streets. eg Dog wardens do a better job with record-keeping so the numbers look larger. eg The numbers picked up by dog wardens are those previously picked up by the police. (allow)	2	One mark answers will often describe the change, rather than explain why the sudden rise has occurred. **1 mark** For a plausible statement, eg The wardens are doing the job. eg The police are no longer doing the job. eg The police did not do a good job. eg The consequences for abandoning dogs lessened. **0 marks** For no credit-worthy material.

Question			Answer	Marks	Guidance
		(ii)	**Evidence 11% rise – alternative explanation** **2 marks** For a plausible alternative **explanation** that identifies a trigger for what happened in 2008–2009, eg In the year of the sudden rise, there was a financial recession, so more people may not have been able to afford to keep their dogs and so abandoned/did not keep them/could not care for them. eg A celebrity culture for keeping dogs arose at that time and led to more people getting them and abandoning them later.	2	One mark answers will not add the development that accounts for the abandonment of more dogs. **1 mark** For a plausible **statement**, eg Dogs became more expensive to keep. eg More people may have become poorer. **0 marks** For not identifying a trigger, eg Dogs are expensive to keep. OR For no credit-worthy material. To aid marking, read candidate response and add "therefore there was an 11% increase …", and see if this makes sense.
4			**Assumption:** **There are two main approaches to identifying the assumption – Value judgements (see below) and Use/nature of data (see right column).** ***Value judgements about data/access to data*** **3 marks** • It is a *bad* thing for *(local) authorities* to have access to very personal data • *(Local) authorities* don't have access to this data already. **2 marks** • It is a *bad* thing for the state/society etc to have access to very personal data.	3	***Use and nature of data*** **3 marks** • *(Local authorities) could/would/will/want (to* use*)* this data • This data *could/would* be used in a dangerous way by *(local) authorities* • Individuals would give true information about themselves to *(local) authorities*. **2 marks** • People (anyone) could/would/want to use this data (in a dangerous way).

Question	Answer	Marks	Guidance
	1 mark • It might be a good thing that *(local) authorities* have access to very personal data. **0 marks** • It is dangerous for *(local) authorities* to have access to personal data. (*this is what is argued explicitly*)		**1 mark** • *(Local) authorities* might not want to use the data • *(Local) authorities* might not be able to use the data. **0 marks** • Data/most data will be of a personal *(stated)*/sensitive *(does not have to be assumed)* nature • Access to data too easy (*is implied*) • No data pertaining to the individual should be accessed/used by *(local) authorities*. *(too broad)*
5	**One reason:** **3 marks** For a reason that relates specifically to the introduction of the dog **licence**. The latter could be referred to as 'it' in the reason, eg • Owners may not buy the licence • It doesn't provide any permanent form of dog identification • Many owners will be put off buying a licence by its annual cost. * For 3 marks the reason should relate to the licence.	3	**2 marks** For a reason that is not specifically related to the introduction of the dog licence, eg • Not all stray dogs are lost • People will be irresponsible. **1 mark** For an answer that goes beyond a reason (eg an argument), or includes extra argument elements (eg an example), eg • Irresponsible owners won't buy a licence, so dogs still won't be able to be identified • Irresponsible owners, like those who don't put collars on their dogs, won't be bothered to buy a licence either. **0 marks** For no credit-worthy material.

Question			Answer	Marks	Guidance
6			**Links between reasoning and conclusion** **1 mark** for **direct reference** to any part of the correct conclusion. • These findings warn that there are dangers in the continued use of microchips in both animals and human beings • Human beings • There are dangers in the continued use of microchips. **1 mark** for **direct reference** to any part of the reasoning. • At least one case. **Either 2 marks** for a correct point of assessment that focuses directly upon the link between the reasoning about animals and the conclusion about human beings **OR** about reasoning from specific animals to animals in general **OR 1 mark** for a correct point which focuses upon the evidence related to only one case. • The reasoning is weak because it only gives evidence of one definite case of a dog where the implant caused cancer. [1] Example of a 4 mark answer: • The conclusion is about "both animals and human beings" (✓). The reasoning given to support it is about "mice", "rats" and "dogs" (✓). The conclusion therefore is weakened by the fact that there is no reasoning about humans (✓✓). NB If there is no text reference to the conclusion or the reason but a weak assessment, credit 1 mark.	4	*** Use ticks ✓ throughout the assessments in Q6 to identify where marks are awarded in the candidate's answer.** * These marks should be credited independently of each other, ie it is not necessary to gain the first before the others can be credited. * The reference to the text maybe brief. A full quotation is not necessary. * The reference to the text need not be indicated by speech marks.

Question	Answer	Marks	Guidance
7	**Document** Award up to **3 marks** for each correct answer: **2 marks** for a **correct developed justification**, eg • Big Brother Watch might be biased in their interpretation of dog micro-chipping **because of their aim to protect personal freedom** *(developed justification ✓✓)*. or **1 mark** for a **correct limited justification**, eg • Big Brother Watch might be biased in their interpretation of dog micro-chipping **because this is their job** *(limited justification ✓)*. **Additional 1 mark** Additional mark where the correct assessment is supported by a **relevant reference to the text**, eg • Big Brother Watch might be biased in their interpretation of dog micro-chipping because of their aim to protect personal freedom *(developed justification ✓✓)* by looking **"for the sly, slow seizure of control by the state – of power, of information and of our lives."** *(relevant reference ✓)*. **0 marks** For no credit-worthy material.	2x3	* **Use ticks ✓throughout the assessments in Q7 to identify where marks are awarded in the candidate's answer.** * **A correct assessment of a source within the document** • is capped at 1 mark, eg "The credibility of the campaign director" • However if the individual source is used as an example to assess the credibility of the whole document, it can access all 3 marks, eg "The credibility of Document 5 is increased by its use of the expertise of its campaign director because …". * **Credibility criteria** • Credit only assessments related to **RAVEN** criteria not corroboration (N includes its opposite, bias) • Assessments that relate to the **same** credibility criterion can only be credited if a different assessment is made, eg vested interest that weakens and a different assessment of VI that strengthens credibility • If candidates choose **both bias and vested interest**, they can only be credited if the same material is not used twice • Accept **experience** as a version of **expertise**. * **Reference to the text** • This need not be in quotation marks • It need not be a sentence – a relevant phrase or term may be adequate to support an assessment • This needs to be relevant to the assessment made • It needs to justify why credibility is strengthened by expertise rather than being evidence of expertise • The name of the website, www.bigbrotherwatch.org.uk, can be used where relevant.

Question	Answer	Marks	Guidance

8	**Consistency with charging £7–£35 for micro-chipping:**
	
	 • **Source:** The Member of Parliament (1)
	
	     Claim:
	
	     "…the introduction of compulsory micro-chipping/it would not represent a financial barrier (to dog ownership) (for vulnerable groups)." (1)
	
	 • **Source:** Dogs Trust (1)
	     Do not credit Dogs Trust as a source if it is simply part of the reference to the text, ie "Instead the Trust recommends …".
	
	     Claim:
	
	     "it involves a small *one-off fee* (rather than an annual fee)." (1)
	
	 * **There are no other possible answers.**
		2x2	* **Use ticks ✓ throughout Q8 to identify** where marks are awarded in the candidate's answer.
			
			 * Credit **1 mark** for a correct source, if the correct claim is identified but recorded incorrectly, eg through inaccurate paraphrase or through ellipses where the "one-off fee/payment" is not actually stated.
			
			 * **Popular errors**
			
			 Dogs Trust – compulsory micro-chipping as *"the most effective means of dog identification".*
			
			 MP – compulsory micro-chipping as the *"preferred option to deal with problems of identification".*
			
			 MP – *"It would provide a lifetime of security for a one-off payment."*
			
			 Document 1 – *"micro-chipping which would involve a one-off fee."*
			
			                                         Credit 0 marks

Question			Answer	Marks	Guidance
9	(a)		• **Claim:** **1 mark** For an accurate statement of the claim. **0 marks** For an inaccurate or incorrect statement of the claim. • **Assessment of each point:** **2 marks** For an accurate point that **assesses the person in relation to an aspect of their claim** by applying a relevant credibility criterion. *eg "As a seasoned campaigner against microchips, she might have a vested interest to preserve her public standing by making an accurate claim about the dangers of the continued use of microchips."* **Or 1 mark** For an accurate point that **assesses the person** without reference to an aspect of their claim by applying a relevant credibility criterion. *eg "As a seasoned campaigner, she might have a vested interest to preserve her public standing."* **An additional 1 mark – can only be awarded if 2 marks have been awarded for the assessment** For a correct point of assessment (whether weak or strong) that **explicitly indicates** how this **strengthens or weakens** the claim. *eg "This would weaken the credibility of her warning about their continued use."* **0 marks** For an irrelevant or inaccurate assessment/no credit-worthy material.	1 3x3	* **Use ticks** ✓ **throughout Q9(a) to identify** where marks are awarded in the candidate's answer. * **Credibility criteria** • Credit only assessments related to **RAVEN** criteria not corroboration (N includes its opposite, bias) • Assessments that relate to the **same** credibility criterion can only be credited if a different assessment is made, eg vested interest that weakens and a different assessment of VI that strengthens credibility • If candidates choose **both bias and vested interest**, they can only be credited if the same material is not used twice. * **Reference to the claim** • does not have to be in speech marks • may be only one word • may be a generic word not found in the claim, eg experiments/testing/research/report • a reference to **'microchips'** in the assessment is sufficient to link it with a claim that also includes **'microchips'**. * **Synonyms** of strengthen or weaken should be credited, eg *increases credibility*. Accept *positive/negative credibility, strong/weak, credible/not credible.* * **Cap at 1 mark for** • correct assessment of **an incorrect claim** • correct assessment of **missing claim** (However credit according to the 3 marks available, if the candidate refers to the correct claim in a correct answer) • correct **undeveloped assessment** of correct claim.

Question	Answer	Marks	Guidance
	Dr Albrecht: • **Claim:** "The body of research reviewed in this report indicates a clear causal link between microchip implants and cancer in mice and rats. It also appears that microchips can cause cancer in dogs. They have done so in at least one case, and quite likely in two. These findings therefore warn that there are dangers in the continued use of microchips in both animals and human beings." Accept any part of these claims. • **Assessments:** Example of assessments that would each gain **three** marks: **Reputation/vested interest** As a seasoned campaigner against microchips, she might have a vested interest to preserve her public standing by making an accurate claim about the dangers of the continued use of microchips. This would strengthen the credibility of her warning about their continued use. **Vested interest/lack of neutrality** As a seasoned campaigner against microchips, she may have a vested interest to exaggerate their danger to support her cause. This would weaken the credibility of her warning about their continued use.	1 3x3	

Question			Answer	Marks	Guidance
			Expertise/experience/ability to perceive With a doctorate in education she may not have the relevant expertise required to accurately assess the degree of the link between microchips and cancer. This would weaken the credibility of her warning about their continued use.		
	(b)		**Overall judgement of the claim:** **Credit 1 mark – Judgement** For a clear and explicit judgement about the overall credibility of the claim. **Credit 1 mark – Identifying most important CC** For identifying the most important credibility criterion with reference to at least one other credibility criterion used in 9(a). **Credit 2 marks – Weighing up** For a developed explanation that makes comparisons between assessments, ie why one credibility criterion is stronger and also why another credibility criterion is weaker **Or 1 mark – Attempted justification** For an attempted justification of one credibility criterion or the judgement, without weighing up. These marks should be credited in any combination in which they appear, eg it is not necessary to have a judgement before the other marks can be credited. See guidance adjacent.	4	Use ticks ✓ **throughout Q9(b) to identify** where marks are awarded in the candidate's answer. **Example of a 4 mark answer:** Overall the credibility of Dr Albrecht's claim is weak *(judgement ✓)*. Although she might have a vested interest to be accurate to preserve her public standing which increases the credibility of her claim *(one criterion explained)*, this is outweighed by her lack of expertise in the area *(identifying most important CC ✓)*, because of having a doctorate in education rather than science *(second criterion explained, so weighing up between assessments ✓✓)*. **Example of a 3 mark answer – no judgement:** Although she might have a vested interest to be accurate to preserve her public standing which increases the credibility of her claim *(one criterion explained)*, this is outweighed by her lack of expertise in the area *(identifying most important CC ✓)*, because of having a doctorate in education rather than science *(second criterion explained, so weighing up between assessments ✓✓)*. **Example of a 2 mark answer – attempted justification:** Overall the credibility of Dr Albrecht's claim is weak *(judgement ✓)*, because of her lack of expertise in the area because she has a doctorate in education *(attempted justification without weighing up ✓)*.

Question			Answer	Marks	Guidance
					Example of a 1 mark answer – judgement only: Overall the credibility of Dr Albrecht's claim is weak *(judgement ✓)*.

Question	Answer	Marks	Guidance
10	In this question there are four areas: credibility and plausibility to support one side; and credibility and plausibility to support the other side. For each of the four areas, the assessment could be strong, weak or not covered. See the grid below: <table><tr><td>**Credibility for compulsory micro chipping** Strong/Weak/Not covered MP/Dogs Trust/(Blue Cross/National Office of Animal Health/British Veterinary Assn)</td><td>**Credibility against compulsory micro chipping** Strong/Weak/Not covered Dr Albrecht/RSPCA/ Big Brother Watch</td></tr><tr><td>**Plausibility More effective (or dog licence less effective)** Strong/Weak/Not covered</td><td>**Plausibility Not more effective (or dog licence more effective)** Strong/Weak/Not covered</td></tr></table> **Reasoned case:** Answers might include **some** of the following comparisons: • **The relative credibility of both sides** eg Vested interest The side that claims that the introduction of compulsory micro-chipping of dogs would be an effective solution for welfare issues includes the House of Commons and the Dogs Trust. Both are public bodies **so** would not have a vested interest to exaggerate the positive effect of the	16	**Credibility Strong** Use the annotation • More than one correct source is identified for the side • **and** credibility is assessed for at least one source • **and** credibility (+ criterion) is at least referred to for another source, even if it is not adequately explained. **Credibility Weak** Use the annotation Either a number of sources are identified and criteria named but not applied or only one source's credibility is assessed with at least one criterion. **Plausibility Strong** Use the annotation Either there are completely new thoughts with some reference to the text or the text is developed and discussed or the ideas in the text are synthesized to make a reasoned case. **Plausibility Weak** Use the annotation • A relevant part of the text is restated without development. Apply the levels mark scheme on the next page:

Question			Answer	Marks	Guidance
			recommendation **as** they themselves would gain little from the introduction of compulsory micro-chipping **and** would face possible criticism if the initiative failed. **Therefore** the claims especially that of the House of Commons' motion of '*a positive welfare impact'* is likely to be a considered judgement, strengthening the credibility of this side's views. **However**, on the other side, Big Brother Watch and Dr Albrecht both campaign against liberty lost to government control, **so** they may have a vested interest to exaggerate the negative aspects of the compulsory introduction of the micro-chipping of dogs in order to support their cause, especially the warning of Dr Albrecht that '*these findings therefore warn that there are dangers'*. **Consequently** this weakens the credibility of the claims of the side against the introduction. It **thus** appears that there is a <u>higher degree</u> of possible vested interest to weaken the claims of those that might wish to discredit the introduction, making the <u>credibility of those for the introduction stronger</u>. • **The relative plausibility (likelihood) of conflicting outcomes.** **If** the micro-chipping of dogs is made compulsory and the chips or the records are updated to register subsequent owners, it is likely that there will fewer stray dogs on the streets, **as** the owners will be able to be traced more easily than where a dog's only identification is its collar or disc, which may be removed or accidently broken off. **Also if** the cost of micro-chipping were less than several years of a possible annual dog licence fee and did '*not represent a financial barrier to dog ownership for*		**Level 3** **11–16 marks** **Strong, relative, sustained assessment** **4** areas are strong **13 marks** **3** areas are strong **11 marks** Plus credit **1 mark each** for any of the following: • direct **points of comparison,** with **effective** reference to the text in **at least 3** areas • clear and explicit **overall** judgement drawn from an assessment of **both** credibility and plausibility • **effective** use of specialist terms and argument indicator words. Grammar, spelling and punctuation are accurate. **Level 2** **6–10 marks** **Partial or weak assessment** At least **3** areas covered and **2** are strong **8 marks** **2** areas covered and **2** are strong **6 marks** Plus credit **1 mark each** for any of the following: • **explicit relevant overall** judgement **relating to micro-chipping being the most effective way … ,** and a reference to the text in **at least 2** areas • **correct** use of specialist terms and grammar, spelling and punctuation are adequate. **Level 1** **1–5 marks** **Basic assessment** **1** area covered is strong **3 marks** **At least 2** areas covered weakly **1 mark** **1 or no** areas covered weakly **0 marks**

Question			Answer	Marks	Guidance
			vulnerable groups', owners would more likely comply with the micro-chipping scheme than a dog licence scheme, making the former more effective in tracing stray dogs. **However** in a climate of economic recession with cuts in public funding with no annual income from micro-chipping, even **if** this makes the owners more easily identified, there may not be the resources to fund the catching of the stray dogs and returning them to their owners. This would **therefore** make the alternative of a dog licence fee more effective and *'make a real difference to both dogs and their owners at a local level.'* The likelihood is **therefore** that **although** compulsory micro-chipping might have a greater potential in reducing the numbers of stray dogs by tracing their owners more effectively, the dog licence scheme with an annual fee might be <u>more effective to implement this</u>. Thus the success of the compulsory micro-chipping of dogs <u>seems more credible than it is plausible</u>, as its success would depend upon funding to finance dealing with stray dogs.		Plus credit **1 mark each** for any of the following: • explicit judgement **relating to micro-chipping being the most effective way …** • Grammar, spelling and punctuation do not impede understanding. NB Where areas are covered but not strongly, award marks for the two bullets only, where present. **0 marks** For no creditworthy material. NB The judgement must follow from the reasoning to be credited.

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

Education and Learning
Telephone: 01223 553998
Facsimile: 01223 552627
Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

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