

**Level 2 Award**

**Thinking and Reasoning Skills**

Unit 1 **B901**: Thinking and Reasoning Skills

OCR Level 2 Award

**Mark Scheme for January 2017**

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All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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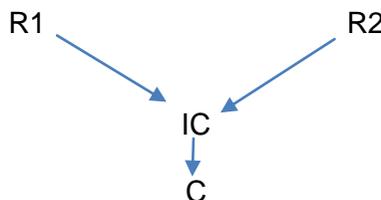
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### Annotations

These are the annotations (including abbreviations), including those used in RM Assessor, which are used when marking

Annotation	Meaning
	Unclear
	Benefit of doubt
	Caret sign to show omission
	Cross
	Development
	Significant amount of material which doesn't answer the question
	Level 1
	Level 2
	Level 3
	Level 4
	Not answered question
	Benefit of doubt not given
	Page seen
	Tick

## MARK SCHEME

Question	Expected Answer	Mark	Rationale/Additional Guidance
1 (a)	Pupil Z	1	
1 (b)	Pupil Y	1	
2 (a) (i)	Underline "(Therefore) people should feel comfortable about visiting zoos"	1	
2 (a) (ii)	Bracket "(So) zoos are safe places for penguins."	1	
2 (a) (iii)	Circle "Therefore" or "So"	1	
2 (b)	Argument map shows the presence of 2 reasons (1) Argument map shows that the 2 reasons operate independently (1) Argument map shows the presence of an intermediate conclusion which supports the main conclusion on its own (1)	3	 <pre> graph TD   R1 --&gt; IC   R2 --&gt; IC   IC --&gt; C </pre>
2 (c)	Credit 1 mark for a correct assumption  Examples for 1 mark There are no other significant dangers to penguins in zoos. (1) The safety of the animals should be a determining factor when considering whether to visit a zoo. (1) The other animals in the zoo are as safe as the penguins. (1)	1	
3 (a)	Credit 1 mark for an undeveloped explanation or for an explanation without explicit reference to a credibility criterion. Credit 2 marks for a developed explanation, with explicit reference to a credibility criterion.	2	Just stating a credibility criterion with no explanation is not worthy of credit.  A developed explanation should include explicit reference to a credibility criterion and it should explain clearly how the credibility of the claim is strengthened or weakened.

Question	Expected Answer	Mark	Rationale/Additional Guidance
	<p>Examples for 1 mark  Tyler has a vested interest to avoid being excluded. (1)  Tyler has ability to see because he was there. (1)  Tyler has a bad reputation. (1)</p> <p>Examples for 2 marks  Tyler has a vested interest to avoid being excluded and this gives him a motive to lie about who started the fight. (2)  Tyler has a bad reputation because he has been in detention 10 times previously this term, so he has been guilty of misconduct in the past and so he is more likely to be guilty on this occasion. (2)</p>		<p>A developed explanation is likely to contextualise the answer (referring back to Tyler’s claim that the other boy started the fight). A developed answer may also include an indicator word.</p> <p>An undeveloped explanation is likely to invite the response, “and so...”</p>
3 (b)	<p>Credit 1 mark for an undeveloped explanation or for an explanation without explicit reference to a credibility criterion.  Credit 2 marks for a developed explanation, with explicit reference to a credibility criterion.</p> <p>Examples for 1 mark  Tyler’s mother has a vested interest to avoid her son being excluded. (1)  Tyler’s mother lacks ability to see because she wasn’t there. (1)  Tyler’s mother is biased because she is likely to favour her son. (1)</p> <p>Examples for 2 marks  Tyler’s mother has a vested interest to avoid her son being excluded because she will not want the problem of finding another school that will take him and so she has a motive to make exaggerated claims about his honesty. (2)  Tyler’s mother is biased towards her son and so she will have a tendency to overlook his faults, which probably includes overlooking the occasions when he has lied. (2)</p>	2	<p>Just stating a credibility criterion with no explanation is not worthy of credit.</p> <p>A developed explanation should include explicit reference to a credibility criterion and it should explain clearly how the credibility of the claim is strengthened or weakened.</p> <p>A developed explanation is likely to contextualise the answer (referring back to Tyler’s mother’s claim that her son did not start the fight or that he does not tell lies). A developed answer may also include an indicator word.</p> <p>An undeveloped explanation is likely to invite the response, “and so...”</p>

Question	Expected Answer	Mark	Rationale/Additional Guidance
4 (a)	7.35	1	
4 (b)	7.10	1	
4 (c)	She could multi-task, e.g. she could do her homework on the bus.	1	
4 (d)	Credit 1 mark each for up to two acceptable answers, for example: <ul style="list-style-type: none"> <li>• The bus could get stuck in traffic.</li> <li>• The bus has to make further stops.</li> <li>• The cyclist could take a more direct route.</li> <li>• The bus could be regularly late in arriving at the bus stop.</li> <li>• The cyclist does not have to walk to the bus stop.</li> </ul>	2	
4 (e)	Credit 1 mark each for possible, reasonable consequences, for example: <ul style="list-style-type: none"> <li>• Fitter children.</li> <li>• More children involved in cycle accidents.</li> <li>• Fewer complaints from local residents about parking or blocked driveways.</li> <li>• More complaints from pedestrians about children cycling on pavements.</li> <li>• Less pollution.</li> <li>• Less traffic congestion.</li> </ul>	2	

Question	Expected Answer	Mark	Rationale/Additional Guidance
5 (a)	Squirrel	1	
5 (b)	Dolphin	1	
5 (c)	Lizard	1	
5 (d)	Monkey	1	
5 (e)	Horse	1	
5 (f)	Penguin	1	
6 (a)	False, because penguins and ostriches cannot fly.	1	There is no credit for just circling true or false. Credit is only given for the reason. Credit can be given for just referring to ostriches or penguins.
6 (b)	False, because insects do not have backbones.	1	There is no credit for just circling true or false. Credit is only given for the reason.
6 (c)	False, because eagles have backbones and they can fly.	1	There is no credit for just circling true or false. Credit is only given for the reason.
6 (d)	True, because both eagles and butterflies lay eggs.	1	There is no credit for just circling true or false. Credit is only given for the reason.
7	<p>Credit up to 2 marks for 2 reasons why the conclusion cannot be drawn from the examples.</p> <p>Examples Just because they were child actors before they went to university, it does not follow that they went to university because they were child actors. Maybe they went to university in spite of being child actors. (1)</p> <p>Jodie Foster and Emma Watson could be atypical/unrepresentative examples. They could be heavily outnumbered by many more child actors who did not succeed academically. (1)</p> <p>We should not over-generalise from just two examples. (1)</p>	2	

Question	Expected Answer	Mark	Rationale/Additional Guidance
8 (a)	<p>Credit 2 marks if there is an accurate statement of each side of the analogy.</p> <p>Example for 2 marks Encouraging young people to work as child performers is compared with forcing children to work down coal mines or in factories. (2)</p> <p>Example for 1 mark Children working as performers are like children working down coal mines. (1)</p>	2	For two marks, the candidate is expected to identify the element of exploitation/children being forced or encouraged to work.
8 (b)	<p>Credit 2 marks if there is an explanation of a relevant similarity which compares both sides of the analogy.</p> <p>Examples for 2 marks In both cases, children may be pressurised into working for the benefit of others. (2)</p> <p>Examples for 1 mark In both cases, there is child labour. (1)</p>	2	For two marks, candidates must identify the element of children being pressurised to work/exploited/working for the benefit of others.
8 (c)	<p>Credit 2 marks if there is an explanation of a relevant difference which compares both sides of the analogy.</p> <p>Examples for 2 marks Encouraging is not the same thing as forcing. Forcing implies compulsion, whereas encouragement can be a positive thing. (2) Many children enjoy performing but few would choose to work in coal mines or factories. (2)</p> <p>Examples for 1 mark Encouraging is not the same thing as forcing. (1) Many children will perform because it is their choice to do so. (1)</p>	2	

Question	Expected Answer	Mark	Rationale/Additional Guidance
9 (a)	<p>Credit 1 mark for an undeveloped explanation or for an explanation without explicit reference to a credibility criterion.</p> <p>Credit 2 marks for a developed explanation, with explicit reference to a credibility criterion.</p> <p>Example for 2 marks Because of the agent’s ability to observe, his observations are likely to be based on his knowledge and experience of the industry in which he works.</p> <p>Example for 1 mark He is an agent so he knows about this business.</p>	2	<p>Just stating a credibility criterion with no explanation is not worthy of credit.</p> <p>A developed explanation should include explicit reference to a credibility criterion and it should explain clearly how the credibility of the claim is strengthened or weakened.</p> <p>A developed explanation is likely to contextualise the answer (referring to claims made by the agent). A developed answer may also include an indicator word.</p> <p>An undeveloped explanation is likely to invite the response, “and so...”</p>
9 (b)	<p>Credit 1 mark for an undeveloped explanation or for an explanation without explicit reference to a credibility criterion.</p> <p>Credit 2 marks for a developed explanation, with explicit reference to a credibility criterion.</p> <p>Example for 2 marks The agent has a vested interest because he takes a percentage of his clients’ earnings, so he has a motive to exaggerate or to present an unbalanced view of the situation.</p> <p>Example for 1 mark The agent has a vested interest because he wants to continue to make a profit.</p>	2	<p>Just stating a credibility criterion with no explanation is not worthy of credit.</p> <p>A developed explanation should include explicit reference to a credibility criterion and it should explain clearly how the credibility of the claim is strengthened or weakened.</p> <p>A developed explanation is likely to contextualise the answer (referring to claims made by the agent). A developed answer may also include an indicator word.</p> <p>An undeveloped explanation is likely to invite the response, “and so...”</p>

Question	Expected Answer	Mark	Rationale/Additional Guidance
10	<p><b>Performance descriptions for 7 to 9 marks: Level 3</b></p> <ul style="list-style-type: none"> <li>• The conclusion is precisely and clearly stated.</li> <li>• Reasons are persuasive, cogent and fully developed.</li> <li>• Counter arguments are valid.</li> <li>• The structure of the reasoning is clear and explicit and places minimal reliance on assumptions.</li> <li>• Evidence derived from the documents is used critically and strengthens the argument.</li> <li>• Grammar, spelling and punctuation are good.</li> <li>• Any ideas borrowed from the documents are developed and expanded.</li> </ul> <p><b>Performance descriptions for 4 to 6 marks: Level 2</b></p> <ul style="list-style-type: none"> <li>• The conclusion is clearly stated.</li> <li>• Reasons which are plausible and relevant are offered.</li> <li>• The structure of the reasoning is not fully explicit and does rely on some assumptions.</li> <li>• Evidence derived from the documents is used to strengthen the argument.</li> <li>• Grammar, spelling and punctuation are adequate.</li> <li>• Any ideas borrowed from the documents are re-expressed in the students own words and used appropriately but not necessarily further developed.</li> </ul> <p><b>Performance descriptions for 1 to 3 marks: Level 1</b></p> <ul style="list-style-type: none"> <li>• The conclusion is imprecise and unclear.</li> <li>• Reasons offered are undeveloped and only provide weak support for their conclusion.</li> <li>• Structure is either absent or minimal or unclear.</li> <li>• Ideas are copied from documents with our further development.</li> </ul>	9	<p>A “best fit” approach should be adopted when assigning an answer to a level. The quality of the reasoning is the most important factor in determining the level for a response. At least two developed reasons, relevant to the conclusion, are expected for a top level answer.</p> <p>If candidates argue in the wrong direction, they can access a maximum of 4 marks (bottom of Level 2).</p> <p>Possible reasons:</p> <ul style="list-style-type: none"> <li>• Being a child performer need not involve an excessive time commitment.</li> <li>• The time commitment may be no greater than that devoted to any other hobby or interest.</li> <li>• The experience gained can be valuable in developing a career as an adult.</li> <li>• Children can benefit from the money earned.</li> <li>• The experience of performing may be of more educational benefit than school.</li> <li>• There can be a regulatory framework to avoid children being exploited.</li> <li>• Without child actors, many films could not be made.</li> <li>• Candidates could explore the definition of “child performer” in Document A. If a gymnast or a dancer is a performer, why not a footballer? Would a ban involve seeking to prevent all under 16s from performing in any sporting fixture?</li> </ul>

Question	Expected Answer	Mark	Rationale/Additional Guidance
11	<p><b>Performance descriptions for 7 to 9 marks: Level 3</b></p> <ul style="list-style-type: none"> <li>• The conclusion is precisely and clearly stated.</li> <li>• Reasons are persuasive, cogent and fully developed.</li> <li>• Counter arguments are valid.</li> <li>• The structure of the reasoning is clear and explicit and places minimal reliance on assumptions.</li> <li>• Evidence derived from the documents is used critically and strengthens the argument.</li> <li>• Grammar, spelling and punctuation are good.</li> <li>• Any ideas borrowed from the documents are developed and expanded.</li> </ul> <p><b>Performance descriptions for 4 to 6 marks: Level 2</b></p> <ul style="list-style-type: none"> <li>• The conclusion is clearly stated.</li> <li>• Reasons which are plausible and relevant are offered.</li> <li>• The structure of the reasoning is not fully explicit and does rely on some assumptions.</li> <li>• Evidence derived from the documents is used to strengthen the argument.</li> <li>• Grammar, spelling and punctuation are adequate.</li> <li>• Any ideas borrowed from the documents are re-expressed in the students own words and used appropriately but not necessarily further developed.</li> </ul> <p><b>Performance descriptions for 1 to 3 marks: Level 1</b></p> <ul style="list-style-type: none"> <li>• The conclusion is imprecise and unclear.</li> <li>• Reasons offered are undeveloped and only provide weak support for their conclusion.</li> <li>• Structure is either absent or minimal or unclear.</li> <li>• Ideas are copied from documents with our further development.</li> </ul>	9	<p>A “best fit” approach should be adopted when assigning an answer to a level. The quality of the reasoning is the most important factor in determining the level for a response. At least two developed reasons, relevant to the conclusion, are expected for a top level answer.</p> <p>If candidates argue in the wrong direction, they can access a maximum of 4 marks (bottom of Level 2).</p> <p>Possible reasons:</p> <ul style="list-style-type: none"> <li>• There is a danger that some parents may impose extreme or intolerant views on their children.</li> <li>• Some parents may deny their children the opportunity to take exams and access certain careers or university courses.</li> <li>• Some parents may exploit their children, for example by making them work in the family business and denying them a formal education.</li> <li>• Some parents may deny their children the opportunity to mix with a diverse range of people.</li> <li>• Candidates may choose to argue against faith schools or independent schools, in the context of parental choice.</li> <li>• Some parents may choose an education for their child based on an unrealistic assessment of their child’s abilities, e.g. choosing a highly pressurised academic education for a child who is not academic.</li> </ul>

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