

Thinking and Reasoning Skills

OCR Level 2 Award

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

Mark Scheme for January 2013

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.














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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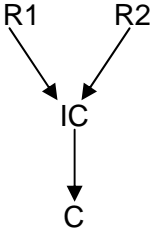
Annotations

Annotation	Meaning
	Correct point
	Incorrect point
	Benefit of the doubt
	No benefit of doubt given
	Information omitted
	Unclear
	Level one
	Level two
	Level three
	Level four
	Not answered question
	Development
	Irrelevant, a significant amount of material that does not answer the question

Subject-specific Marking Instructions

- 1.1 Marking must be positive. Marks must not be deducted for inaccurate or irrelevant answers. Half-marks must not be used.
- 1.2 The full range of marks should be used. Do not be afraid to award full marks or no marks. Failure to do this will seriously affect the distribution of marks.

- 1.3 Be consistent from script to script and from batch to batch.
- 1.4 It is not possible to cover every possible type of response within a levels of response mark scheme and examiners are expected to use their professional judgement at all times in ensuring that responses are placed in the correct levels and given an appropriate mark within that level.
- 1.5 If a candidate reaches a particular level s/he must be rewarded with a mark within that level. It is not necessary to work through the levels.
- 1.6 Where a band of marks is indicated for a level these marks should be used with reference to the development of the answer within that level. Decide the appropriate level first and then mark within that level.
- 1.7 The mark scheme primarily aims to reward the demonstration of the skills. **Where examples are given these are not prescriptive but intended as a guide.** If in doubt refer to your team leader.

Question		Answer	Marks	Guidance
1	(a)	<p>1 mark for underlining “he should be sacked.”</p> <p>1 mark for placing brackets around “he never set any homework”.</p> <p>1 mark for placing brackets around “he could not explain things properly”.</p> <p>1 mark for circling “so”.</p>	4	<p>The mark is to be awarded to candidates who underline the indicator word as part of the main conclusion.</p> <p>“should” is to be accepted as a possible indicator word.</p>
	(b)	<p>1 mark for identifying that there are 2 independent reasons.</p> <p>1 mark for identifying the intermediate conclusion supports the main conclusion directly on its own.</p>	2	<p>Map should look like this:</p>  <pre> graph TD R1 --> IC R2 --> IC IC --> C </pre> <p>Reasons do not have to be numbered.</p> <p>Allow MC for main conclusion.</p> <p>Allow C1 and C2 instead of IC and C/MC.</p> <p>To show that the reasons are independent, there needs to be two separate lines from the reasons to a conclusion and there should be no plus sign.</p>
2	(a)	1 mark for explanation.	1	
	(b)	1 mark for argument.	1	
	(c)	1 mark for information.	1	
	(d)	1 mark for rant.	1	

Question	Answer	Marks	Guidance
3	<ul style="list-style-type: none"> • 1 mark for any relevant credibility criterion. <p>Example</p> <p>Bias (1 mark) Expertise (1 mark) Ability to Observe (1 mark)</p> <ul style="list-style-type: none"> • 1 mark for undeveloped explanation. <p>Example</p> <p>Because he is her husband (1 mark)</p> <p>He is not a doctor (1 mark)</p> <ul style="list-style-type: none"> • 2 marks for developed explanation. <p>Example</p> <p>Because he is her husband he will overlook her faults and want to exaggerate her good qualities (2 marks).</p> <p>He is not a doctor so he will not be able to judge her skills and knowledge (2 marks).</p>	3	<p>Undeveloped explanation will generally lack indicator words and/or invite the question “and so?”</p> <p>Where there is a mismatch between credibility criterion and explanation do not award mark for credibility criterion but award either 1 or 2 marks depending on whether explanation is developed or undeveloped.</p> <p>Allow neutral where candidate means bias (ie not neutral).</p> <p>The credibility criterion must be relevant. Reputation is not a relevant credibility criterion that would weaken credibility.</p> <p>1 mark for relevant credibility criterion only.</p> <p>3 marks for criterion plus developed explanation matched to criterion.</p>
4	<p>Credit 1 mark for any weakness in the way the poll was conducted up to 4 marks.</p>	4	<p>Candidates will be expected to focus on points to do with size of sample; unrepresentative nature of sample; way in which survey was conducted.</p> <p>Anticipated points will include:</p> <ul style="list-style-type: none"> • Only asked 5 students • Only asked Y8 students • Only asked those students who help him tidy up after class

Question		Answer	Marks	Guidance
				<ul style="list-style-type: none"> • They don't get anonymity so might not want to hurt his feelings • There is lack of fit between the question asked in poll and the conclusion drawn • Y8 students are not necessarily well informed about teaching standards.
5		1 mark for circling "having at least one son or one daughter".	1	
6		1 mark for circling "being an adult".	1	
7	(a)	1 mark for identifying that there are hundreds of bikes reported missing in Oxford and Cambridge but only a small number in Stoke on Trent.	1	Candidates need to recognise "hundreds" but allow near equivalents for small number eg hardly any/very few.
	(b)	1 mark for 2010.	1	
	(c)	1 mark for each plausible alternative conclusion up to 2 marks for two separate points.	2	<p>Anticipated points will include:</p> <ul style="list-style-type: none"> • Same number of thieves stealing more bikes • Same number stolen but more reported stolen • Thieves are more expert at stealing/getting better at stealing • Better/more accurate records are being kept of bikes stolen • Getting easier to steal bikes because security not so good.
	(d)	1 mark for 28.	1	

Question		Answer	Marks	Guidance
8	(a)	1 mark for Annabel.	1	
	(b)	1 mark for Beth.	1	
	(c)	1 mark for Gerald.	1	
9	(a)	1 mark for Anne.	1	
	(b)	1 mark for 1, 12, 5, 24.	1	
	(c)	1 mark for cbscbsb.	1	
10	(a)	1 mark for identifying any significant difference.	4	The first mark is awarded for identifying a relevant difference between the two things that are being compared (training dogs to find earthquake victims and training bears to do entertaining tricks) by reference to only one side of the analogy. The second mark is awarded either for comparing the two sides of the analogy or for explaining what makes training bears unacceptable or training dogs acceptable.
	(b)	<p>Examples of differences and explanations.</p> <p>Training the bears involves the use of electric prods. (1 mark).</p> <p>What the dogs are trained to do is necessary work. (1 mark).</p> <p>Bears are not naturally good at riding bikes (1 mark).</p> <p>“The bears are trained using instruments of torture and this is cruel and barbaric” (2 marks).</p> <p>“Dogs save lives, so training dogs is acceptable” (2 marks).</p> <p>“The dogs are doing something that comes naturally to them, whereas the bears are doing something unnatural” (2 marks)</p>		

Question	Answer	Marks	Guidance
11	<p>1 mark for any practical option other than outright ban of circuses to protect the animals from abuse.</p> <p>Up to 2 marks for two separate options.</p>	2	<p>Anticipated points could include</p> <ul style="list-style-type: none"> • Ban the use of animals in circuses but not circuses • Introduce tougher laws on treatment of animals in circuses • Better enforcement of existing laws through more people employed to check up on circuses and monitor what is going on • Ban use of electric prods/whips etc in training of circus animals • Make circuses employ vets to oversee care and training of animals • Develop more humane methods of training animals with rewards not punishments.
12	<p>1 mark for each distinct example of a dangerous activity or object which is not banned up to 2 marks for two separate points.</p>	2	<p>Anticipated points could include</p> <ul style="list-style-type: none"> • Hang gliding • Bungee jumping • Abseiling • Driving a car • Smoking cigarettes • Travelling to dangerous countries.
13	<p>1 mark for each valid point explaining why the evidence is weak. Up to three marks for three valid points explained.</p>	3	<p>Anticipated points could include</p> <ul style="list-style-type: none"> • The evidence relates to damage to property not to harm to the general public so provides no support for this part of Carl's claim • The evidence is a single instance/one example so only weakly supports the claim that circus animals are "often" a danger to their trainers • The evidence is arguably out of date so does not provide strong support for the situation now.

Question		Answer	Marks	Guidance	
				Content	Levels of response
14		<p>Indicative content for 10 marks</p> <p>Circuses are bad for wild animals. They are deprived of their natural habitat confined to small cages and forced to live apart from other animals of the same species. For example a circus may only have one or two elephants but they naturally live in herds and travel 25 miles each day. Circuses are bad for humans because they bring out the worst in us. The owners are willing to be cruel just to make a profit and those who watch are willing to accept cruelty just for the sake of a laugh. They serve no educational purpose now because shows like Life on earth allow everyone to see animals close up in their natural environment. Therefore circuses are bad for animals, bad for people and not necessary in the modern world.</p> <p>Indicative content for 6 marks</p> <p>Circuses are bad for animals. It has been shown that they are often treated cruelly with trainers using violence to get them to do tricks. They are bad for humans because these animals can be dangerous attacking their trainers when they escape. They are not needed nowadays with lots of other forms of entertainment like TV easily available. So circuses are bad and not needed.</p>	10	<p>Anticipated points include the following:</p> <p>For circuses are bad for animals:</p> <ul style="list-style-type: none"> • Deprived of space to roam • Deprived of natural habitat eg sea; jungle • Deprived of companionship of other animals eg herd • Training involves inflicting pain • Performance is humiliating. <p>For circuses are bad for people</p> <ul style="list-style-type: none"> • Encourages people to be cruel • Encourages people to enjoy spectacles which are mindless • Potential dangers. <p>For circuses not useful anymore</p> <ul style="list-style-type: none"> • Travel makes it possible to see animals in wild • TV/Internet makes it possible to see animals close up in natural habitats • Education about animals does not need circuses • There are a whole variety of entertainments available now not available in past DVD; playstation; TV shows. 	<p>Performance descriptions for 7 to 10 marks:</p> <ul style="list-style-type: none"> • The conclusion is precisely and clearly stated • Reasons are persuasive, cogent and fully developed • The structure of the reasoning is clear and explicit and places minimal reliance on assumptions • Any ideas borrowed from the documents are developed and expanded • Evidence derived from the documents is used critically and strengthens the argument • Grammar, spelling and punctuation are good. <p>Performance description for 4 to 6 marks:</p> <ul style="list-style-type: none"> • The conclusion is clearly stated • Reasons which are plausible and relevant are offered • The structure of the reasoning is not fully explicit and does rely on some assumptions

Question			Answer	Marks	Guidance	
					Content	Levels of response
			<p>Indicative content for 3 marks</p> <p>Animals are treated badly and not kept properly. It is disgusting and disgraceful. People should be ashamed of themselves. You can find out more from watching TV. Anyway they are boring.</p>			<ul style="list-style-type: none"> Any ideas borrowed from the documents are re-expressed in the candidate's own words and used appropriately but not necessarily further developed Evidence derived from the documents is used to strengthen the argument Grammar, spelling and punctuation are adequate. <p>Performance description for 1 to 3 marks:</p> <ul style="list-style-type: none"> The conclusion is imprecise and unclear possibly implied rather than stated Reasons offered against are undeveloped and only provide weak support for their conclusion and are mixed with rant and irrelevant information Structure is either absent or minimal or unclear Ideas are copied from the documents without further development Evidence derived from the documents is not always relevant or significant

Question			Answer	Marks	Guidance	
					Content	Levels of response
						<ul style="list-style-type: none"> Grammar, spelling and punctuation may be inadequate.

Question	Answer	Marks	Guidance
15	1 mark for circling "wrong".	1	
16	1 mark for circling "better than natural".	1	

Question			Answer	Marks	Guidance	
					Content	Levels of response
17			<p>Indicative content for 7 marks</p> <p>Air travel is not unnatural in the sense of wrong or evil. It is unnatural in the way that the developments of modern science, like the electric light bulb, or the developments of modern medicine, like cures for cancer, are unnatural. They only happen because we have used our brains. But these things like air travel benefit people and the advantages outweigh the risks so they should not be banned.</p> <p>Indicative content for 4 marks</p> <p>Air travel is not as dangerous as driving a car. There are lots of car accidents everyday but hardly ever any plane crashes. It is not unnatural because it is down to science. So there is nothing wrong with it.</p>	7	<p>Anticipated points include the following:</p> <ul style="list-style-type: none"> Not unnatural because not rare or uncommon Not unnatural because it is something many people do Not unnatural because developed as a result of using our natural intelligence Not unnatural because not wrong = doesn't harm anyone else directly Not dangerous because very common yet accidents very rare Other forms of transport have more accidents Just because something is dangerous doesn't mean it should be banned Just because something is unnatural does not mean it should be banned. 	<p>Performance description for 5 to 7 marks:</p> <ul style="list-style-type: none"> Precise conclusion clearly identified At least two reasons are provided for the conclusion, which are persuasive, cogent and fully developed Evidence and/or examples are provided which are both precisely relevant and adequate The structure of the reasoning is clear and explicit and does not rely on assumptions.

Question			Answer	Marks	Guidance	
					Content	Levels of response
			<p>Indicative content for 2 marks</p> <p>There are hardly ever any plane crashes and how can it be unnatural if we do it? So it would be stupid to stop doing it.</p>			<p>Performance description for 3 to 4 marks:</p> <ul style="list-style-type: none"> • A conclusion is identified but may be imprecise or over blown • At least two reasons are provided for the conclusion but at most one is fully developed and not open to challenge • Evidence and/or examples if provided may be relevant but not adequate • The structure of the reasoning is not fully explicit and does rely on some assumptions. <p>Performance description for 1 to 2 marks:</p> <ul style="list-style-type: none"> • The conclusion may not be explicitly identified • Reasons are undeveloped and only provide weak support for their conclusion • Evidence and/or examples are not provided • Structure is either absent or minimal or unclear.

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

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