Level 2 Award

Thinking and Reasoning Skills

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

OCR Level 2 Award

Mark Scheme for January 2014

1. **Annotations**

Annotation	Meaning
✔	Correct point
✘	Incorrect point
BOD	Benefit of the doubt
NBOD	No benefit of doubt given
⌃	Information omitted
?	Unclear
L1	Level one
L2	Level two
L3	Level three
L4	Level four
NAQ	Not answered question
DEV	Development
IRRL	Irrelevant, a significant amount of material that does not answer the question

2. **Subject-specific Marking Instructions**

1   Marking must be positive. Marks must not be deducted for inaccurate or irrelevant answers. Half-marks must not be used.

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.

3   Be consistent from script to script and from batch to batch.

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.

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.

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.

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)	(i)	Credit 1 mark for the correct identification of the conclusion: • Credit 1 mark for underlining the sentence: <u>Consequently, all schools should replace their lights with yellow ones.</u> • The mark is to be awarded to those candidates who omit to underline the indicator word *'consequently'* but underline the key claim which constitutes the conclusion: <u>all schools should replace their lights with yellow ones.</u>	1	
		(ii)	Credit 1 mark for circling the word consequently.	1	Credit "should"
	(b)	(i)	Credit 1 mark for correctly circling <u>Map B.</u>	1	
		(ii)	Credit 1 mark for any answer which states that the reasons are <u>joint/not separate/not independent</u>. **Examples:** Reasons are joint (1 mark). Reasons do depend on each other (1 mark). The reasons do not make sense on their own (1 mark).	1	The mark is not available to candidates who incorrectly circle Map A or Map C in answer to the first part of the question.
	(c)		Assumptions may include: • Yellow (or coloured) lights have a positive effect. • Yellow lights are readily available. • It is possible to change all school lights to yellow ones. • Yellow makes you happy. Credit 1 mark for a realistic assumption which is clearly stated.	1	

Question			Answer	Marks	Guidance
2	(a)		Credit 1 mark for <u>opinion.</u>	1	
	(b)		Credit 1 mark for <u>fact.</u>	1	
	(c)		Credit 1 mark for <u>irrelevant appeal</u>. This does not need to be directly stated, provided the idea is expressed (e.g. It is a flaw that is based on popular support of the majority).	1	Accept <u>appeal to popularity</u> or <u>tu quoque</u>
3	(a)		Identify any three patterns in the data: Credit 1 mark for any pattern associating personal details in the data up to 3 marks for distinct claims. Patterns which do not associate personal details do not get the mark, e.g., **no** mark for pointing out 4 females and 4 males. **Examples:** • All females are vegetarian / all the non-vegetarians are male. • Males who are vegetarian believe it is important to eat healthily. • All vegetarians eat 5 fruit and vegetables per day. • All females eat 5 fruit and vegetables per day.	3	

Question			Answer	Marks	Guidance
	(b)		Credit 1 mark for an undeveloped answer and 2 marks for a developed answer. **Examples (2 marks):** • The sample size of 8 classmates is too small to make generalisations to the whole school. • The sample size is unrepresentative to make generalisations to the whole school. • The data collected does not actually provide any information regarding who is healthiest. Therefore the data does not provide any evidence to substantiate this claim. • Believing it is important to eat healthily is not the same as being healthy. Therefore the data does not provide any evidence to substantiate this claim. **Examples (1 mark)** • The sample size is too small. • Students all come from one class. • The table only says that they believe it's important to be healthy.	2	A developed answer will often include indicator words. An undeveloped answer often invites the response, "and so…."
4			Credit 1 mark for each correct identification up to 4 marks for 4 correct answers. <table><tr><td></td><td>Taxi</td><td>Bus</td><td>Train</td><td>Cycle</td></tr><tr><td>Bethany</td><td>X</td><td>√</td><td>X</td><td>X</td></tr><tr><td>Clive</td><td>X</td><td>X</td><td>X</td><td>√</td></tr><tr><td>Edward</td><td>√</td><td>X</td><td>X</td><td>X</td></tr><tr><td>Fazena</td><td>X</td><td>X</td><td>√</td><td>X</td></tr></table> **Example:** (a)Bethany travels to college by <u>bus.</u> (b)Clive travels to college by <u>cycle.</u> (c)Edward travels to college by <u>taxi.</u> (d)Fazena travels to college by <u>train.</u>	4	

Question			Answer	Marks	Guidance
5	(a)		Credit 1 mark for <u>2</u>.	1	
	(b)	(i)	Credit 1 mark for 11.44(am).	1	
		(ii)	Because the cement still takes three hours to set (words to that effect).	1	
	(c)		Credit 1 mark for Design is rotated 45° clockwise	1	
6	(a)	(i) (ii)	Credit 1 mark for any relevant question which could be asked of the photograph to evaluate it as evidence for the claim that many UK teenagers are binge drinkers. **Examples of questions** Was the photograph taken in the UK? Is the photograph staged? Are the girls models who are being paid? How old are the girls? What's in the bottles? Credit 1 mark for any relevant explanation of the question. Please note the question must match the explanation to gain the full 2 marks for each question/explanation. **Examples of explanations** Question: How old are the girls? Explanation: They might not be teenagers.	2+2	

Question			Answer	Marks	Guidance
	(b)	**(i)**	Credit 1 mark for (c) *It will be harder for teenagers to buy alcohol.*	1	
		(ii)	Credit 1 mark for (c) *People will be deterred from buying stronger alcoholic drinks*.	1	
		(iii)	Credit 1 mark for (b) *If teenagers are better informed, they will make better choices.*	1	
7	**(a)**		Credit 1 mark for circling 08.00am.	1	
	(b)		Credit 1 mark for an answer which demonstrates an understanding of the following: because she would arrive at the bus stop at 8.05 and catch the delayed 8.00am which will leave at 8.15, arriving at her destination at 8.55 plus the 5 minute walk – arriving at 9.00am.	1	Not all of these details are essential to gaining a mark.
8	**(a)**	**(i)**	Credit up to 2 marks for an explanation of a strength in Dr. James' credibility. 2 mark examples: • He works with psychiatric patients so has probably had plenty of experience of people claiming to have been abducted by aliens. • He has the ability to see as he was responsible for the survey. 1 mark examples: • He works with psychiatric patients all the time. • He did the survey himself.	2	No credit is to be given for simply naming a credibility criterion, but it may enhance the clarity of an explanation. 2 mark answers will be developed, perhaps making use of indicator words such as so, because…

Question			Answer	Marks	Guidance
		(ii)	Credit up to 2 marks for an explanation of a weakness in Dr. James' credibility. 2 mark examples: • He has something to gain from the attention these results get, because he has written a book about alien abductions. • He is biased because it is clear in saying 'typical' in document A that he already believed in alien abductions. • He based his research on psychiatric patients who may not be able to distinguish between fantasy and reality. 1 mark examples: • He will get money from book sales. • He is a believer. • He based his research on psychiatric patients.	2	
	(b)		Credit 1 mark for each reasonable explanation. **Examples:** • As the sample consisted of mental health patients they could have been taking powerful drugs. • The participant could have been dreaming. Credit 1 mark for any other reasonable explanation.	2	
	(c)		Assumptions may include: • If aliens exist they must have visited earth. • That aliens have the technology to visit/abduct humans. • That aliens would want to visit/abduct humans. • That life on other planets is intelligent life. • That the scientific evidence referred to is correct. Credit 1 mark for each realistic assumption.	2	

Question			Answer	Marks	Guidance
	(d)		Credit 1 mark for 'false dilemma' or 'restricting the options'.	1	
	(e)	**(i)**	Credit 1 mark for ticking the 4th box: 'Sufficient but not necessary evidence for alien abduction'.	1	See marking guidance point 9 for crossed out and duplicated answers.
		(ii)	Credit up to 2 marks for an explanation that shows an understanding of why 2 'yes' answers would be sufficient (1 mark) but not necessary (1 mark). 2 mark example: • Sufficient because you only need 2 out of 3 yes answers as evidence of abduction, but not necessary because it would still be evidence if you answered yes to a different 2 questions. 1 mark examples: • Because you only need 2 out of 3 yes answers. • Because answering yes to 1 and 2 would still be evidence.	2	
9			**Performance descriptions for 7 to 9 marks: Level 3** • The conclusion is precisely and clearly stated. • Reasons are persuasive, cogent and fully developed • Counter arguments are valid. • The structure of the reasoning is clear and explicit and places minimal reliance on assumptions. • Evidence derived from the documents is used critically and strengthens the argument. • Grammar, spelling and punctuation are good. • Any ideas borrowed from the documents are developed and expanded. **Performance descriptions for 4 to 6 marks: Level 2** • The conclusion is clearly stated. • Reasons which are plausible and relevant are offered.	9	Top level answers which argue the opposite way to what the question asks for (reasons that support the claim) can be awarded a maximum of 4 marks (bottom L2).

Question			Answer	Marks	Guidance
			• The structure of the reasoning is not fully explicit and does rely on some assumptions. • Evidence derived from the documents is used to strengthen the argument. • Grammar, spelling and punctuation are adequate. • Any ideas borrowed from the documents are re-expressed in the students own words and used appropriately but not necessarily further developed. **Performance descriptions for 1 to 3 marks: Level 1** • The conclusion is imprecise and unclear. • Reasons offered are undeveloped and only provide weak support for their conclusion. • Structure is either absent or minimal or unclear. • Ideas are copied from documents without further development. • Evidence derived from the document is not always relevant or significant. • Grammar, spelling and punctuation may be inadequate. **Example:** Your research is wrong. You are only after money and anyone could find a scar on their body without knowing how it got there so some of the questions you asked weren't very good. **Performance descriptions for 0 marks** • No conclusion. • Claims are irrelevant and imprecise. **Example:** If you think people have been abducted by aliens you are crazy.		

Question	Answer	Marks	Guidance
10	**Performance descriptions for 7 to 9 marks: Level 3** • The conclusion is precisely and clearly stated. • Reasons are persuasive, cogent and fully developed • Counter arguments are valid. • The structure of the reasoning is clear and explicit and places minimal reliance on assumptions. • Evidence derived from the documents is used critically and strengthens the argument. • Grammar, spelling and punctuation are good. • Any ideas borrowed from the documents are developed and expanded. **Performance descriptions for 4 to 6 marks: Level 2** • 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. • Evidence derived from the documents is used to strengthen the argument. • Grammar, spelling and punctuation are adequate. • Any ideas borrowed from the documents are re-expressed in the students own words and used appropriately but not necessarily further developed. **Performance descriptions for 1 to 3 marks: Level 1** • The conclusion is imprecise and unclear. • Reasons offered are undeveloped and only provide weak support for their conclusion. • Structure is either absent or minimal or unclear. • Ideas are copied from documents without further development. • Evidence derived from the document is not always relevant or significant. • Grammar, spelling and punctuation may be inadequate.	9	

Question			Answer	Marks	Guidance
			Performance descriptions for 0 marks • No conclusion. • Claims are irrelevant and imprecise.		

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