

## Thinking and Reasoning Skills

OCR Level 2 Award

Unit **B902**: Thinking and Reasoning Skills Case Study

## Mark Scheme for June 2012

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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.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.













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## Annotations

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

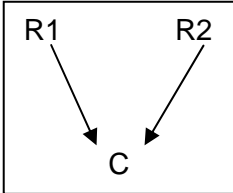
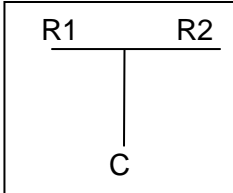
**Subject-specific Marking Instructions****Use of the Mark Scheme**

- 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		<p>Award one mark for each correctly ticked box as follows:</p> <ul style="list-style-type: none"> <li>Barcelona had the greatest number of players in the 'highest paid' list</li> <li>The most highly paid footballer played for Real Madrid.</li> </ul>	2	<p>If four boxes are ticked, no marks should be awarded. If three boxes are ticked, a maximum of 1 mark can be awarded, if the two correct answers are identified.</p>
2	(a)	<p>Candidates who have written any of these answers correctly into the spaces provided should get 1 mark for each correct answer as follows:</p> <p>Footballer 1 played for Real Madrid            Footballer 2 earned £10.4 million            Footballer 8 played for Manchester City and earned £7 million.</p>	4	
	(b)	<p>Candidates who place a tick in the correct box should get 1 mark for each correctly placed tick as follows:</p> <p>Real Madrid paid too much for its players: Opinion            AC Milan did not pay any player more than £6.5 million: Fact.</p>	2	<p>Candidates who tick more than one box for each statement should not be credited.</p>
3	(a)	<p>Candidates who place a tick in the 'explanation' box should get 1 mark.</p>	1	<p>Candidates who tick more than one box should not be credited with any marks.</p>
	(b)	<p>Candidates who place a tick in the 'argument' box should get 1 mark.</p>	1	<p>Candidates who tick more than one box should not be credited with any marks.</p>
4	(a)	<p>1 mark for circling the 1<sup>st</sup> box.</p>	1	<p>Candidates who circle more than one box should not be credited.</p>

Question	Answer	Marks	Guidance
(b)	<p>2 marks to be awarded for a developed explanation that clearly links to their circled criterion.</p> <p>1 mark for an undeveloped explanation or one that lacks clarity.</p> <p>Examples of 2 mark explanations:</p> <p><i>His expertise will be limited to Irish football and what is true of football in Ireland might not be true worldwide where foreign clubs may have different challenges and finances.</i></p> <p><i>He has a vested interest because the Irish Premier League can't afford the top players at the moment and a salary cap would allow them to get better players.</i></p> <p>Example of 1 mark explanation:</p> <p><i>He probably only knew about Ireland.</i></p> <p><i>His ability to see is poor because top players don't play in Ireland</i></p>	2	<p>The marks are only awarded for the explanation. No mark is to be credited for simply circling a criterion.</p> <p>Answers which do not deal with credibility or refer to a credibility criterion that is not given in the question should attract no marks.</p> <p>Answers which merely use a generic explanation of a criterion, such as '<i>he has a vested interest because he has something to gain</i>' should not be credited.</p> <p>Answers which use a credibility criterion to explain the <u>strength</u> of his credibility, no marks can be awarded.</p>
5	(a)	1	Candidates who tick more than one box should not be credited.
	(b)	1	
	(c)	2	For 2 marks the candidate must demonstrate understanding of the analogy by relating the similarity to the issue of pay or by showing awareness of the unfairness or absurdity of treating them in the same way.

Question	Answer	Marks	Guidance
	<p>Examples of 2 marks answers:</p> <ul style="list-style-type: none"> <li>• Equal pay would be unfair as they have different levels of skill.</li> <li>• They shouldn't be paid the same because they require different amounts of training.</li> <li>• They both require different amounts of effort so they shouldn't be paid the same.</li> </ul> <p>1 mark for a similarity which is valid but which lacks clarity in relation to the meaning of the analogy.</p> <p>Examples of 1 mark answers:</p> <ul style="list-style-type: none"> <li>• They are both unfair</li> <li>• One is harder than the other</li> <li>• The footballers work in the same profession and the nurse and surgeon work in the same profession.</li> </ul>		<p>Where a candidate completely misunderstands the point of the analogy, for instance '<i>it's fair to pay them the same in both cases</i>', this cannot be credited.</p>
(d)	<p>2 marks for a relevant and clearly stated difference which demonstrates understanding of the analogy.</p> <p>1 mark to be awarded where a difference is identified but which lacks clarity or development.</p> <p>Examples of a 2 marks answer:</p> <ul style="list-style-type: none"> <li>• Footballers at different levels are still footballers doing the same job, whereas a nurse and a surgeon do totally different jobs.</li> </ul> <p>Example of a 1 mark answer:</p> <ul style="list-style-type: none"> <li>• Doctors and nurses do different jobs.</li> <li>• Nurses can't do brain surgery but footballers can play well.</li> </ul>	2	<p>For 2 marks the candidate must demonstrate understanding of the analogy by identifying a difference which justifies paying footballers the same whilst not justifying paying nurses and brain surgeons the same.</p> <p>1 mark answers will identify a difference but lack the clarity to explain the difference.</p>

Question	Answer	Marks	Guidance	
6	(a)	1 mark for underlining ' <i>Manchester City shouldn't be able to have an unfair advantage over other teams</i> '.	1	
	(b)	1 mark for placing a tick against 'slippery slope'.	1	Candidates who tick more than one box should not be credited.
7	(a)	1 mark for each correctly identified reason. <ul style="list-style-type: none"> <li><i>A cap would mean that there would be more money to spend on charitable projects if they weren't spending it all on wages</i></li> <li><i>(Also,) capped wages would mean the fans would benefit from less expensive ticket prices.</i></li> </ul>	2	Candidates who bracket only part of a reason cannot be credited.  Where a candidate has bracketed both reasons within the same set of brackets, one mark should be credited.
	(b)	1 mark for circling the word 'so' in the passage.	1	Allow 1 mark for 'should'.
	(c)	Up to 2 marks for an argument map showing that there are two independent reasons directly supporting a conclusion.  1 mark for a map showing 2 reasons. 1 mark for a map showing independent reasoning directly supporting the conclusion.  	2	The inclusion of a plus sign in between the two reasons ( R1 + R2) would indicate joint reasoning, so the second mark could not be credited.  The inclusion of an intermediate conclusion in the map would mean the second mark could not be credited.  There also need to be two distinct lines coming from the reasons, so the following answer would again not attract the second mark.  
8		1 mark for placing a tick against 'counter-argument'	1	Candidates who tick more than one box should not be credited.



Question		Answer	Marks	Guidance
9	(a)	<p>Credit 1 mark for any clearly stated assumption.</p> <p>Some possible answers:</p> <ul style="list-style-type: none"> <li>• He assumes that it is <i>possible</i> for people to change career to professional football</li> <li>• He assumes that people have chosen not to be a professional footballer</li> <li>• He assumes that it is possible to change to a career that earns what footballers earn</li> <li>• He assumes that people's careers are freely chosen</li> <li>• He assumes that people can't earn big money without changing their career.</li> </ul>	1	<p>No marks for anything that is stated within the argument.</p> <p>Answers which say that you can only earn large amounts of money by being a footballer cannot be credited.</p>
9	(b)	<p>Credit 2 marks for each relevant developed reason which could be used to justify footballers earning more than refuse collectors.</p> <p>Examples of 2 mark answers:</p> <ul style="list-style-type: none"> <li>• Refuse collection does not involve much training, but footballers have to train every day.</li> <li>• Emptying bins could be done by almost any physically healthy person, whereas only a handful of people could develop the skills needed for professional football</li> <li>• Professional footballers have to start really young, often sacrificing their education, so their pay needs to reflect this.</li> </ul> <p>Examples of 1 mark answers:</p> <ul style="list-style-type: none"> <li>• You don't need to train to empty bins</li> <li>• Football involves more commitment.</li> </ul>	2+2	<p>2<sup>nd</sup> mark should be awarded for development of a relevant reason. Simply restating the conclusion '<i>so they should be paid more</i>' does not constitute a valid development.</p> <p>Development in this question can involve either making an explicit comparison between footballers and refuse collectors <u>or</u> developing a reason which justifies paying high wages to a footballer or low wages to a refuse collector.</p> <p>Distinct points need to be made in each answer to attract marks. Where the same reasoning is used in each answer, only one can be credited.</p>

Question	Answer	Marks	Guidance
10 (a)	<p>Credit 2 marks for a plausible explanation for the difference which is developed.</p> <p>Credit one mark for an answer which identifies a reason for the difference, but which doesn't develop it.</p> <p>Examples of 2 mark answers:</p> <ul style="list-style-type: none"> <li>• They might be biased toward their own club due to loyalty, so might want to see their own players earn more</li> <li>• They want their team to be able to have the best players, so wouldn't want a cap on what their own team can pay to attract these players</li> <li>• Their own team might be unable to pay high wages anyway, so there is no reason to want a salary cap for their own team</li> <li>• The way the questions were worded might have led to inconsistency in the answers.</li> </ul> <p>Examples of 1 mark answers:</p> <ul style="list-style-type: none"> <li>• They might be biased</li> <li>• They want their team to have the best players</li> <li>• They were inconsistent</li> <li>• They didn't read the questions properly.</li> </ul>	2	<p>2<sup>nd</sup> mark can be awarded for development of a plausible explanation that shows an understanding of the difference.</p> <p>There are three main types of approach possible here:</p> <ul style="list-style-type: none"> <li>• Explaining the reason for holding inconsistent attitudes</li> <li>• Justifying the inconsistency</li> <li>• Explaining limitations of the survey itself.</li> </ul>

Question	Answer	Marks	Guidance
(b)	<p>2 marks to be awarded for an answer that correctly identifies and explains either that the sample would not be representative or that it would be selective because it is drawn just from Liverpool fans.</p> <p>2 mark example:</p> <ul style="list-style-type: none"> <li>• The sample would not represent a range of views so we can't draw general conclusions from it.</li> <li>• The answers would reflect the views of Liverpool fans which may be very different from those of a smaller club.</li> </ul> <p>1 mark to be awarded for answers which identify a limitation but do not explain it.</p> <p>1 mark example:</p> <ul style="list-style-type: none"> <li>• Liverpool fans would be biased.</li> <li>• The sample is limited.</li> <li>• Only one club is represented.</li> </ul>	2	The words representative and selective do not need to be present to attract full marks.
(c)	<p>Award one mark for a reasonable point that the journalist would need to know to justify the claim that a <b>swing</b> has occurred.</p> <p>Award a second mark for explaining why this would be needed.</p> <p>2 mark examples:</p> <ul style="list-style-type: none"> <li>• He would need to have knowledge of a previous survey in order to know whether support has increased.</li> </ul> <p>1 mark examples:</p> <ul style="list-style-type: none"> <li>• He would need to know what fans thought before.</li> </ul>	2	<p>A reasonable point would need to be related to a previous survey or some other way of determining opinion on footballers' wages in the past.</p> <p>Reference to weaknesses in the survey methodology are not to be credited.</p>

Question	Answer	Marks	Guidance
(d) (i)	<p>Credit 1 mark for any clearly stated assumption that is based on the connection between the cost of attending a match and a clampdown on wages.</p> <p>Some possible assumptions:</p> <ul style="list-style-type: none"> <li>• He assumes (that fans see) a connection between wages and match day expense</li> <li>• He assumes that (fans believe that) ticket prices will come down if wages are cut</li> </ul>	1	<p>No marks for anything that is stated within the argument.</p> <p>Creditworthy answers can either be written in the form that the journalist is assuming something directly or that he is assuming that the fans in the survey believe something – see bracketed examples of possible answers.</p>
(d) (ii)	<p>Credit 1 mark for any plausible alternative explanation for a <b>change</b> in public mood.</p> <p>Some possible alternative explanations:</p> <ul style="list-style-type: none"> <li>• People might have thought about it more because of media coverage</li> <li>• People might have lost their jobs or be having money problems themselves</li> <li>• Footballer wages might have got higher recently so people are getting annoyed</li> <li>• The recession is making it more difficult for people to afford tickets</li> </ul>	1	<p>Answers which give no indication of change cannot be credited.</p>
11	<p>Up to 3 marks for each relevant counter argument</p> <p>1 mark to be awarded for stating a claim that would counter the claim given.</p> <p>1 mark for a reason that supports the counter claim given.</p> <p>1 mark for development of the reason.</p> <p>Examples of 3 mark answers for claim 1 (MarkyMark):  <i>"...footballers need to be good role models by being less greedy."</i></p>	3+3	<p>No credit for an argument or claim that <i>supports</i> the claims in the question.</p> <p>Each of these are compound claims and counter arguments that deal with either element of each claim are creditworthy.</p> <p>2 marks can be awarded for a developed reason even if there is no counter claim, as long as the counter is implicit in the reason given.</p>

Question	Answer	Marks	Guidance
	<ul style="list-style-type: none"> <li>• There is no need for footballers to be role models [1 mark for counter claim] because they are being paid for their skill as footballers not for their personalities, [1 mark for reason] so their behaviour off pitch is irrelevant [1 mark for development].</li> <li>• Footballers are not greedy [1 mark for counter claim] because they are highly skilled and have made sacrifices in their lives to get to where they are [1 mark for reason]so deserve every penny they earn [1 mark for development].</li> </ul> <p>Example of 2 mark answers to the first claim:</p> <ul style="list-style-type: none"> <li>• Footballers are good role models [1 mark for counter claim], they often do work for charity [1 mark for a reason].</li> <li>• It's people like politicians and royalty who should be role models [1 mark for reason] because they're in positions where they should be expected to behave well [1 mark for development].</li> </ul> <p>Example of 1 mark answers:</p> <ul style="list-style-type: none"> <li>• Footballers have worked hard for their money [1 mark for reason].</li> <li>• Footballers aren't greedy [1 mark for counter claim].</li> </ul> <p>Examples of 3 mark answers for Claim 2 (TinaKarina):</p> <p><i>"... all the best players would move to other countries to get higher wages..."</i></p>		<p>3 marks can be awarded, even if the structure is unclear, as long as a reason is given to support a counter claim and there is some development of this reason.</p>

Question	Answer	Marks	Guidance
	<ul style="list-style-type: none"> <li>They might not move to other countries [1 mark for counter claim], because they might not want to move away from their family and friends [1 mark for reason], because that is more important to them than money [1 mark for development].</li> </ul>		
12	<p>Example of a level 3 answer:</p> <p>Your aims and objectives state that you wish to use your power and influence responsibly to improve the game. However, paying footballers ridiculous amounts of money is not responsible and nor does it improve the game. Money and power can corrupt people and this can lead to bad behaviour, which is very public for footballers and creates a bad image for their team and the game overall. It is clear that the only way to ensure that footballers are good role models and the game is well represented is to cap the salaries of footballers. [5 marks]</p> <p>Example of a level 2 answer:</p> <p>You are being irresponsible in paying high salaries to players. It would be much better to spend the money on better facilities such as a new training ground and a better stadium. You could also use the money saved to reduce ticket prices so more fans would come and watch. [3 marks]</p> <p>Example of a level 1 answer:</p> <p>Think of all the starving children in Africa, you should halve footballers salaries and send the money to them. [1 mark]</p>	5	<p><b>Performance descriptions for 4 to 5 marks: Level 3</b></p> <ul style="list-style-type: none"> <li>The conclusion is precisely stated and focused on the issue of irresponsibility.</li> <li>Two reasons are provided for the conclusion, at least one of which is focused on the issue of irresponsibility and is persuasive, cogent and fully developed</li> <li>The structure of the reasoning is clear and explicit and places minimal reliance on assumptions.</li> <li>Grammar, spelling and punctuation are good.</li> </ul> <p><b>Performance description for 2 to 3 marks: Level 2</b></p> <ul style="list-style-type: none"> <li>The conclusion is clearly stated</li> <li>At least one reason is provided for the conclusion, which is plausible and relevant</li> <li>The structure of the reasoning is not fully explicit and does rely on some assumptions.</li> <li>Grammar, spelling and punctuation are adequate.</li> </ul> <p><b>Performance description for 1 mark: Level 1</b></p> <ul style="list-style-type: none"> <li>The conclusion is imprecise and unclear or unstated</li> <li>Reasons are undeveloped and only provide weak support for their conclusion</li> <li>Grammar, spelling and punctuation may be inadequate.</li> </ul> <p>Candidates should be awarded a level based on the quality and relevance of their reasoning. The precision of their conclusion can be used to determine the number of marks awarded within the level.</p>

Question	Answer	Marks	Guidance
			<p>For level 3 the candidate needs to address the issue of why high salaries are irresponsible.</p> <p>Candidates who simply offer alternative ways of spending the club's money, but fail to give reasons as to why high salaries are irresponsible, are limited to level 2.</p> <p>No credit can be given for an argument in favour of high footballer salaries.</p>
13	<p>Award up to 9 marks for an argument <i>in favour</i> of the view that wages should be based upon contribution to society.</p> <p>An example of a level 3 answer:</p> <p>There are many reasons why wages in general should be based upon contribution to society. Firstly, it would be of benefit to society as a whole because more people would do jobs that help others, like nursing or teaching, if there were a financial incentive to go into jobs like these. Also, society would probably run more effectively as people would be working together more. Another reason is that it may have a positive effect on people's values, encouraging people to be less selfish and to value helping others more, which can only be a good thing. Finally, jobs that help others are often more difficult and emotionally challenging. For example, nurses have to deal with injured children and teachers sometimes have to put up with insulting behaviour from pupils and they don't earn a lot of money.</p> <p>Therefore, salaries for jobs that help others should be higher than salaries for jobs that don't. [9 marks]</p>	9	<p><b>Performance descriptions for 7 to 9 marks: Level 3</b></p> <ul style="list-style-type: none"> <li>• The conclusion is precisely stated</li> <li>• Reasons are provided for the conclusion, which are persuasive, cogent and fully developed</li> <li>• The structure of the reasoning is clear and explicit and places minimal reliance on assumptions</li> <li>• Evidence and examples are provided which are both relevant and clearly strengthen the reasoning</li> <li>• Grammar, spelling and punctuation are good.</li> </ul> <p><b>Performance description for 4 to 6 marks: Level 2</b></p> <ul style="list-style-type: none"> <li>• The conclusion is clearly stated</li> <li>• Reasons are provided for the conclusion, which are plausible and relevant</li> <li>• The structure of the reasoning is not fully explicit and does rely on some assumptions</li> <li>• Evidence and examples are provided which are relevant but are open to challenge</li> <li>• Grammar, spelling and punctuation are adequate.</li> </ul> <p><b>Performance description 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 are undeveloped and only provide weak support for their conclusion</li> <li>• Structure is either absent or minimal or unclear</li> </ul>

Question	Answer	Marks	Guidance
	<p>An example of a level 2 answer:</p> <p>People should be paid for their contribution to society because that would be fair. People like firemen save lives and take risks, which footballers just don't do. Also doctors and nurses save lives and make sick people well again. Footballers just kick a ball around a field and try to get it in the goal. Society gets more from brain surgeons than from Wayne Rooney. [5 marks]</p> <p>An example of a level 1 answer:</p> <p>Footballers don't deserve the money they get. All they do is a bit of training, play 90 minutes a week and get millions. What do they do for society other than making fans happy when they win? David Beckham might look good in flashy ads but he doesn't help people who are starving. [3 marks]</p>		<ul style="list-style-type: none"> <li>• Evidence and examples are poorly developed or explained and are open to obvious counter examples and objections</li> <li>• Grammar, spelling and punctuation may be inadequate.</li> </ul> <p>We are looking here for candidates to take the argument beyond the specific example of footballers' wages and apply their reasoning to the wider issue of the contribution made to society.</p> <p>For level 3 candidates will need to produce at least one developed reason which is based on more than just good examples. There needs to be a clear reason given as to why the contribution to society is a strong criterion for higher wages.</p>



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