

## MARK SCHEME for the May/June 2006 question paper

### 8436 THINKING SKILLS

8436/02

Paper 2

Maximum raw mark 50

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 Examiners were initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

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 must be read in conjunction with the question papers and the *Report on the Examination*.

The minimum marks in these components needed for various grades were previously published with these mark schemes, but are now instead included in the Report on the Examination for this session.

- CIE will not enter into discussion or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the May/June 2006 question papers for most IGCSE and GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



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**1 Comment briefly on:**

**(a) (i) the reliability of Zamora as a witness**

**[2]**

Seemingly very reliable - Zamora is evidently well thought of by colleagues and is a church goer and 'serious' police officer (whatever that means). There is no reason to suppose he would lie; or obvious vested interest. Expertise seems high - knows his aircraft etc. Loss of glasses, erratic movements, and 'panic' may have compromised his ability to see.

**(ii) the plausibility of his account**

**[2]**

There is nothing in general that is implausible about the report, as it may have a perfectly ordinary or commonplace explanation - a hoax, a secret aircraft trial (e.g. moon-landing vehicle), etc. What are less plausible are the details: the strange markings, the two little people, the speed of the departure. Also it may be considered implausible that no one else saw it. What would be implausible would be to jump to paranormal conclusions.

**(b) How strong is the corroboration given to Lonnie Zamora's story by the other witnesses and facts?**

**[4]**

There is plenty of corroboration, though not all of it is reliable.

- Several quite high-ranking officials saw and confirmed the burn marks, dents etc., which is strong corroboration. Photograph 1. shows them at the site.
- There is photo evidence of a dent, but it is poor quality and could have been caused by many things. The evidence of footprints is weak and contradictory, since the weight of the two figures would not have been enough to make such marks (given that the other marks needed 'tons' of pressure according to the engineer).
- Chavez arrived quickly but missed seeing the object, so adds little.
- Gallego saw something similar nearby and later. He could easily have made it up after hearing about Socorro, though he denies this. It is just his word. However, there are marks on the ground there. He could have made these if he had heard details of Socorro, but that is a little far-fetched. He would have a motive if he wanted to seek publicity - many do.
- The strongest corroboration comes from the many officials and investigators who are persuaded by the evidence, even though trying to debunk story.

Overall, it would be fair to say the corroboration was strong.

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- (c) Does the passage offer strong support for the claim that the earth has been visited by aliens? Support your answer with reference to the evidence. [5]

Various conclusions can be drawn. However, the less plausible and more 'paranormal' they are, the more justification they would require. As there was only one witness, and he could have been mistaken (given the points made in (a)(i) above). This would tend to rule out aliens etc. The evidence would much better support some ordinary explanation. However, this must be weighed against the lack of evidence for any ordinary explanation. The evidence really leads to an unsolved mystery, which is in fact how the officials did leave it - see Quantanilla's statement.

In marking this question it is not so much what conclusion the candidate draws (provided not wildly far-fetched) as whether it is consistent with their evaluation of the evidence.

**Generic**

- Acceptable conclusion [1]
- and:*
- Some reference to the evidence, made in support of the conclusion [1]
  - Reference to the evidence and some evaluative points made in order to support the conclusion [2]
  - A reasoned argument developed on the basis of evaluation of points of evidence; possibly some alternative scenarios considered [3]
  - Sound and well developed argument involving the weighing of evidence and balancing of probabilities; plausible alternative scenario/s taken into consideration [4]

**Max 5**

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**2 (a) Identify the main conclusion of the argument.**

The favouring of applicants from less-privileged backgrounds is wrong.

**[1]**

**(b) Give the two reasons that the author gives for positive discrimination being counter-productive.**

Any favouring of underprivileged candidates will necessarily discriminate against the regular candidates.

The feeling of unfairness is likely to be more profound than the apparent rewards of the job/award that has been won.

**(c) Assess the relevance and adequacy of the analogy in the second paragraph.**

Relevance: whereas we can identify and resolve the root problem in the bicycle tyre example, we may not be able to in the case of privilege.

Relevance: the weakness of the tyre is a result of the (bicycle) system, just as the "more difficult starting point" of someone applying for a job is a result of the system.

Relevance: it may be that there is no correlate to "a completely fixed bike" in this case.

Adequacy: we may decide to fix the tyre superficially if we cannot solve the more complex systemic problem.

**1 mark per point of assessment [up to a maximum of 3]**

**(d) Identify an unstated assumption made by the author in the third paragraph.**

Assumption that there are a limited number of places.

Assumption that the feelings of the candidate have any bearing on the actual fairness of the situation.

**Clear statement of an assumption: 2 marks**

**(e) Give four points of assessment with respect to the strength or weakness of the reasoning in the last paragraph.**

Evidence is from university students – not representative of all jobs offered and fought for.

The candidates interviewed cannot compare their predicament with what it would be like not to have gone to university.

The evidence is simply not sufficiently strong to draw conclusions about the rewards of the job from it.

The low confidence levels may not be a result of the special treatment – they may be an understandable feature of the candidates applying for appointments from underprivileged backgrounds.

Relevant strengths of the evidence – for instance it does support the lesser conclusion that the unfairness caused by an underprivileged upbringing cannot be simply eradicated by a procedural innovation.

**One mark per point of assessment [up to a maximum of 4]**

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3 (a) For each of the following, decide whether it can reliably be concluded from the evidence in the above passage:

(i) Someone who drinks four 150 ml cups of filter coffee exceeds the average UK daily consumption of caffeine. [1]

No, it cannot be reliably concluded because we cannot be sure of the caffeine content of individual's coffee. The UK figure is an average; the Canadian study shows that there is a wide range (although not all in filter coffee).

Reasoning not necessary for mark

(ii) It would be extremely difficult to consume a fatal dose of caffeine as part of a normal diet. [1]

Yes, assuming that there are no caffeine rich sources of food in normal diet that are not on the table. Fatal dose is 10 g. That would be the equivalent of 71.5 200 ml cups of coffee in a very short space of time or around eight and a half kilos of dark chocolate.

Reasoning not necessary for mark

(iii) In the Canadian study, no actual serving contained less than 30 mg of caffeine.[1]

No, we cannot reliably conclude this. 30 mg was the minimum caffeine content in a range for a 150 ml cup. Actual servings included much smaller cups, which may have contained less than 30 mg of caffeine.

Reasoning not necessary for mark

(iv) The average daily caffeine consumption per person is greater in Canada than in the UK. [1]

No, we cannot reliably conclude this. We have no information on how much caffeine Canadians consume.

(b) How well does the evidence support the statement that, 'caffeine's critics are wrong?' [3]

Not very well. No evidence is presented to support this conclusion directly by showing that the supposed health worries are unfounded. The evidence supports the claim that caffeine has many health benefits. However, there is a confusion in the evidence between caffeine and coffee. It is assumed that the beneficial ingredient in coffee is caffeine. The penultimate paragraph suggests that this may not be the case.

Two relevant points [2]

One evaluative point arising from points made [1]

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- (c) How would you respond to the author's suggestion that we should drink the amount of coffee we feel happy with? [2]

Relevant response supported by relevant reason (2)

Relevant response (1)

e.g. The author's suggestion is very sensible because coffee has benefits and disadvantages. We each need to weigh up the best option for us. (2)

The author's suggestion is worrying, because many of us feel happy with things that are very bad for us and make bad choices. (2)

The author assumes we will make good choices. (1)

We need rules to guide us. (1)

- (d) 'Nobody steals or commits murder for caffeine.' How far does this comment answer concerns raised in the above argument about the addictiveness of caffeine? [3]

It suggests that caffeine is not worryingly addictive like heroin or crack cocaine. The addiction is not a social problem and does not lead to criminal behaviour. To this extent the comment answers concerns. However, it does not answer concerns about withdrawal symptoms or feeling uncomfortable with a substance making demands on one.

We should also credit answers which suggest that, although nobody robs banks or commits murder for caffeine, they do exploit small farmers in a way which would not be possible if we could take it or leave it. Thus our addiction leads to the global equivalent of mugging.

**2 marks for relevant points**

**1 mark for evaluation arising from points made**

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4 (a) Critically evaluate the following argument. You should:

Show that you have a clear understanding of the argument by identifying its main conclusions and the reason used to support it. [3]

**Main conclusion:** an annual limit on spending should be imposed on every football club.

**Reasons:**

**Intermediate conclusion:** that the club will get more money from winning and 'thus the cycle goes on'.

The lifestyle that the players can afford creates unrealistic expectations, envy and dissatisfaction in the young.

Kills competition, so sport becomes predictable.

Other teams are forced to sell their most successful players.

Create wider competition.

Ensure a more equal distribution of wealth and skills between the teams.

(b) Evaluate the argument by identifying any unstated assumptions and discussing any weaknesses and flaws. [6]

**Assumptions:**

*Including* the young idolise players for their wealth, not their skill.

Successful teams are not as entertaining to watch as less successful teams.

A spending limit will lead to a wider distribution of *skills* between teams.

**Weaknesses/flaws:**

*Including* that expensive players are better footballers;

The wealthier a team, the more successful they will be.

The claim that the players' large salaries is detrimental to impressionable youngsters has nothing to do with the betterment of the game by creating a more equal distribution of skills.

(c) Offer two further arguments which could be used in support of the argument, or against the argument. [4]

**Further arguments in support of the conclusion:**

*Including* football clubs that are limited in what they can spend on players in lower leagues are more exciting spectator sports, there is less certainty of their success and position in the league from season to season.

**Further arguments against the conclusion:**

*Including* if spending was limited, the quality of the game would suffer. There would be fewer exceptionally talented players, arguments claiming that this would have to be a world-wide policy or some teams would be at a disadvantage in international competition, which would, again, cause an uneven playing field.

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### Mark Grid

<i>Descriptor</i>				
	<b>Level 3:</b>	<b>Level 2:</b>	<b>Level 1:</b>	<b>Level 0:</b>
<b>Part (a) Analysis</b>	L2 + evident understanding of <b>structure/ techniques</b>	Identifying the main conclusion, and ALL or MOST of the key <b>reasons</b> .	Recognising the <b>general direction</b> of the argument, and some of the <b>reasons</b> .	Summary of the text/parts of the text.
(max. 3)	3 marks	2 marks	1 mark	0 marks
<b>Part (b) Evaluation</b>	L2 + thorough evaluation of strength of argument referring to 3 assumptions and 3 weaknesses/flaws.	L1 + Solid evaluation of strength of argument referring to 2 assumptions, and 2 weaknesses/flaws	General evaluation of strength of argument referring to an assumption and a weakness/flaw.	No valid assumptions/ weaknesses and flaws identified.
(max. 6)	5-6 marks	3 - 4 marks	1-2 marks	0 marks
<b>Part (c) Further Argument</b>	Relevant and well developed	Relevant		
(max. 4)				
For each point up to 2, or for 2 best points.	<b>Add 2</b>	<b>Add 1</b>		