

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
GCE Advanced Subsidiary Level

## MARK SCHEME for the November 2004 question paper

### 8436 THINKING SKILLS

8436/02

Paper 2 (Critical Thinking), 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*.

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

CIE is publishing the mark schemes for the November 2004 question papers for most IGCSE and GCE Advanced Level syllabuses.

**Grade thresholds** taken for Syllabus 8436 (Thinking Skills) in the November 2004 examination.

	maximum mark available	minimum mark required for grade:		
		A	B	E
Component 2	50	34	30	18

The thresholds (minimum marks) for Grades C and D are normally set by dividing the mark range between the B and the E thresholds into three. For example, if the difference between the B and the E threshold is 24 marks, the C threshold is set 8 marks below the B threshold and the D threshold is set another 8 marks down. If dividing the interval by three results in a fraction of a mark, then the threshold is normally rounded down.

**November 2004**

**GCE AS LEVEL**

**MARK SCHEME**

**MAXIMUM MARK: 50**

**SYLLABUS/COMPONENT: 8436/02**

**THINKING SKILLS  
Paper 2 (Critical Thinking)**

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**Question 1 - Marking guidelines:**

The following items of evidence should be considered:

- Lamont L
- Duty Manager DM
- Doorman Drm
- Law firm JKL
- Doctor Doc.
- Business associate BA
- Hotel spokesperson HS
- Claim investigator CI
- Photograph/physical facts Ph
- (Any other relevant evidence AOE)

**Candidates should make the following points:** (1 mark each)

- L Story plausible and consistent with facts. But reliability low due to self-interest, esp. because business is in poor shape. He may have made up the whole story, or may have exaggerated his injuries and losses.
- DM Neutral statement, in the sense that no judgements about blame are made, therefore probably reliable. Notes L's apparent injuries, but leaves open whether he is faking or not.
- Drm Suggests L's injuries are less than serious, but may have been influenced by L's not having given a tip.
- JKL Supports L's claim, but obviously motivated by self interest, esp. given the no-win-no-fee promise in the advertisement. Assertion of blame supported by facts and by HS's statement.
- Doc. *Possibly* prompted by self interest, though professional status at risk if s/he actually falsifies evidence. Anyway, statement carefully qualified: alleged injuries 'consistent' with a fall, but no hard medical evidence offered. Could be described as sitting on the fence to protect him/herself.
- BA Fits in with facts about L's business, but otherwise unreliable. It is hearsay (we don't even know who 'heard' it). Also it is innuendo/sarcasm, rather than an explicit accusation. Also BA has reason for negative feeling towards L, which may colour his judgement.

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- HS Employed by hotel, so not impartial. Ten-year record not relevant since alleged cause (soap dispensers) much more recent. Claims dispensers were installed for hygiene, but lets slip that cost may have been the motive, thus strengthening JKL's claim.
- CI Reliable, professional, neutral, expert, etc. Qualified ('possible') support for L re. non-slip surface. This is best corroboration L has, but still inconclusive.
- Ph Hard evidence. Position of the soap and the hand rail consistent with L's version of events; and confirms that it was necessary to stand up in the bath to get soap. However, doesn't prove L fell or that he was injured.

(AOE 1 extra mark available *either* for an additional relevant point not listed above, *or* for extension of one of the above.)

**Total 10 for:** *sound, thorough coverage of all major points.*

### Evaluation

- Although unreliable because of self-interest and financial circumstances, L's story is generally plausible and consistent with physical facts (photo, etc.) Therefore quite probable that he did slip. (1 or 2 marks)
- No solid evidence that L sustained alleged injuries or that these necessitated time off work, or caused real financial losses, given the negative fact about the business. Strong *possibility* that L exaggerated, even if he didn't invent whole story. Would need further information to decide whether \$30k was a justified claim. (1 or 2 marks)
- If accident occurred, strong grounds for JKL's claim that hotel was culpable for 'cost cutting at expense of safety'. Fact that soap dispensers were removed after the incident is significant. (1 or 2 marks.)

**(Max. 4 marks)**

### Conclusion/decision

One mark for saying **either** that Lamont's claim for compensation should be accepted **or** for saying that Lamont's claim for compensation should be rejected.

**(Max. 1 mark)**

**Total marks for Question 1: 15**

### Question 2 – Answers

**1 In the first paragraph a dilemma [two-sided problem] is explained. What are the two sides of the dilemma?**

- That many people would love to see the paintings **[1]**
- That they are damaged by breath of (even a few) visitors **[1]**

Paraphrases of these two claims are acceptable, provided they include the point about access and the point about damage caused by allowing access.

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**2a Write down the sentence which expresses the main conclusion of the whole passage.**

The right thing to do with the cave paintings is to open them to the public. [1]

**b Identify three of the main reasons the author gives in support of the conclusion.**

*Any 3 from:*

- The priority for archaeologists should be to open sites to the public wherever possible. [1]
- The paintings belong to all of us, (not to archaeologists etc.); we are all descendents of the prehistoric painters. [1]
- The paintings were found this century/the people of this century should have the good fortune. [1]
- Locking up the paintings means no-one gets the benefit/is like keeping a football pitch and never playing on it. [1]
- Allowing only a few people in is unfair/benefits only the privileged minority/does not benefit the bulk of the population [1]
- The paintings were painted for enjoyment/no artist wants their work sealed up in the dark. [1]

**3 What does the author claim to be the top priority when an important archaeological find has been made, and what reason, or reasons, are given for the claim?**

To open the site to the general public whenever it is feasible. [1]

Because the paintings belong to all of us/not just to archaeologists and landowners [1]

**4 What point does the author make by using the football-pitch analogy? How effective do you consider the analogy to be, and why?**

That if something is kept for the future, no one ever gets the benefit of it [1]

It is an effective analogy, because although the examples are very different, they have in common the absurdity of never using something because you don't want to spoil it. [1-2]

Alternatively it could be argued that the analogy is less than fully effective because it implies that no one uses the pitch or sees the paintings, whereas there is the possibility that a few could see the paintings/play on the pitch without spoiling them. [1-2]

**Maximum: 3 marks**

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- 5 Would it either strengthen or weaken the argument (or neither) if experts agreed that the paintings are some of the most beautiful and creative examples of prehistoric art ever discovered? Give at least one reason for your answer.**

It would weaken it in the sense that a great work of art would be lost if it were open to the public [1]; but equally it would strengthen it in the sense that everyone should get to see it if it is so special [1]

For observing both and saying that they balance out/cancel out, and that therefore the claim neither weakens nor strengthens the argument [3]

- 6 Suppose you were an archaeologist who wanted to restrict access to the caves. Briefly give two arguments that you would use against the passage.**

[1 for each of two points; or 2 if the point is supported by a reason, explanation, clarification, qualification, etc.]

E.g.

- If a few people are allowed in measures could be taken that would be impossible if the general public were allowed -such as breathing apparatus... [2]
- The argument claims archaeologists are being selfish, when really they are just being sensible, responsible. [1]
- Archaeologists have earned the right to special status in relation to the finds because of the work and study they have done over many years. The public just want to enjoy the paintings without any of the responsibility/hard work. [2]
- Prehistoric painters possibly/probably did not have the same attitudes/vanities as modern painters; it is likely they painted on the walls to express their own feelings, or to bring luck on the hunt, etc. [2]

**Maximum: 4 marks**

**Total marks for Question 2: 18**

### **Question 3 – Marking guidelines**

#### **Structure of the argument**

##### **Conclusion:**

The suggestion that the minimum age for driving should be raised to 18 is not sensible.

##### **Reasons:**

There are five strands in the reasoning:-

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**1 Because**

the young drivers who are unsafe are those who take deliberate risks and are willing to flout the rules

**and**

having to wait a year to become drivers wouldn't change their personalities,

**[intermediate conclusion]:**

raising the minimum age would have only a temporary effect - i.e. it would reduce accidents in the first year after the law was changed.

Associated with this line of reasoning is an **assumption** that those who act irresponsibly on the roads do so not because they are too young (as is claimed by those who wish to raise the minimum age) but because they have a certain kind of personality.

**2 Raising the minimum age to 18 would be unfair to the majority of young people.**

This involves the **assumption** that, amongst 17-year-old drivers, those who drive unsafely are in the minority. This reason could also be described as an **intermediate conclusion**, supported by the reason that the young drivers who are unsafe are those who flout the rules, together with the assumption that these are a minority of 17-year-old drivers.

**3 those aged over 50 have the fewest accidents,**

**so**

**[intermediate conclusion]**

if you want to reduce accidents by means of age limits, the minimum age should be increased to 50.

This line of reasoning relies on the unstated **assumption** that it would not be sensible to raise the minimum age to 50.

**4 A better way to reduce accidents might be to reduce speed limits.**

**5 The best authorities on the safety of young drivers are those who earn a living teaching them to drive.**

**and**

the advice of driving instructors is that the age limit should not be raised, but instead 17-year-olds should be required by law to have much more intensive tuition from qualified instructors before they take their driving test.



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## Evaluation of the argument

### Truth of reasons, and support they give to the conclusion

- 1 Provided that the claims about those young drivers who cause the problems are true, this section of the reasoning would support a conclusion that raising the minimum age is not sensible in that it would not solve the perceived problem. But no evidence is given to support the claim that the young drivers who are unsafe are those with particular personalities. In order to assess the truth of this, it would be necessary to have information about the personalities of those 17-year-olds involved in accidents - are they generally inclined to take risks and to break the law, and do they still have these tendencies at age 18? It is possible that those who drive unsafely are not an irresponsible minority, and also possible that at the age of 18 they drive more safely.
- 2 Assuming that it is true that unsafe drivers in this age group are a minority, then raising the minimum age could be seen as unfair to the majority in the sense that they are being penalised for the irresponsible actions of others. But this would not give very strong support to the conclusion if the problems caused by this minority were very serious, and if raising the minimum age ensured that the problems did not occur.
- 3 This is meant to show that, taken to its logical extreme, the reasoning of those who wish to raise the minimum age leads to a ridiculous conclusion. It would indeed be ridiculous to suggest that no-one should be allowed to drive until they reach the age of 50. However, the comment probably misrepresents what the opposition says. The case for raising the minimum age to 18 is presumably not that the minimum age should be one which excludes all but the group with a very low accident rate, but rather one which excludes a group with an exceptionally high accident rate. So it would not follow from their reasoning that the age should be raised to 50, and this comment does not seriously undermine the opposition's case.
- 4 This is meant to support the conclusion that raising the age limit is not sensible because there may be a more effective means of reducing accidents. However, the claim that reducing speed limits would be more effective is at odds with what the passage claims about the personalities of those young drivers who are unsafe. If they are unsafe because they take deliberate risks and flout the rules, then they are not likely to obey speed limits, and reducing speed limits would not be effective.
- 5 It may be true that driving instructors are knowledgeable about the safety of young drivers, but it does not follow that their advice should be taken, particularly since their proposed solution to the problem would be one which ensured more employment for themselves. However, this section of the reasoning points to a problem with the opposition's case, which could have been more explicitly stated. Those who wish to raise the minimum age seem to assume that 17-year-olds have a higher accident rate because they are young. But it is possible that they have a higher accident rate because they are relatively inexperienced at driving, in which case raising the minimum age may lead to a higher accident rate amongst 18-year-olds. Thus the claim in the passage that changing the minimum age would only have a temporary effect would be true - but the passage bases this on unsupported claims about the personalities of a minority of young drivers, rather than on the plausible claim about inexperience. Nevertheless, this last section of the reasoning draws attention to the relevant question of experience, which suggests that raising the minimum age may not, by itself, solve the perceived problem.

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### **Further arguments**

#### **In favour of not raising the minimum age**

- Young people have very quick reactions, which slow down with age.
- If 17-year-olds are given responsibilities they will behave responsibly.
- New drivers are (or may be) more accident prone than experienced drivers, at whatever age they start to drive.

#### **In favour of raising the minimum age**

- Raising the age to 18 may be sensible as one measure amongst others to deal with the problem, allowing more time for drivers to gain experience whilst still under supervision.
- Young people may behave more responsibly at age 18 than at age 17.
- 17-year-olds should be free of responsibility for the welfare of others - they should not be given a tool and a licence to act in ways which may cause injuries and deaths.

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### Question 3

#### Mark Grid

Evaluation	Level 3:	Level 2:	Level 1:	Level 0:
<b>Component A</b> <b>Analysis</b>	<b>thorough critical</b> evaluation of the argument, in terms of soundness, strengths, weaknesses, status of claims, assumptions, flaws. (At least 3 categories.)	<b>critical</b> evaluation of <b>some</b> key points in the argument	some evaluation or relevant discussion of the <b>argument</b>	some relevant discussion of the <b>passage</b>
<b>Level 3:</b> L2 + evident understanding of <b>structure/techniques*</b>	<b>12-13</b>	<b>10-11</b>	<b>8-9</b>	<b>6-7</b>
<b>Level 2:</b> identifying the <b>main conclusion</b> , and key elements of at least <b>3</b> of the 5 strands of <b>reasoning</b>	<b>10-11</b>	<b>8-9</b>	<b>6-7</b>	<b>4-5</b>
<b>Level 1:</b> recognising the <b>general direction</b> of the argument, and some of the <b>reasons</b>	<b>8-9</b>	<b>6-7</b>	<b>4-5</b>	<b>2-3</b>
<b>Level 0:</b> summary of the text/ parts of the text	<b>N/A</b>	<b>4-5</b>	<b>2-3</b>	<b>1</b>
<b>Component B:</b> <b>Further argument</b> (max. 4)	relevant and well developed		relevant	
for each point up to 2, or for 2 best points	<b>add 2</b>		<b>add 1</b>	

**A mark for both components should appear on the script**

**E.g. (L 1 analysis/L 2 evaluation): 7 + (F/A) 3 = 10**

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Marks should be justifiable entirely in terms of these descriptors to ensure consistency. Please comment briefly on reasons for marks awarded in any awkward or borderline cases.

**\*Evidence of understanding of structure/techniques can be demonstrated by any of the following:**

- Identification of at least two of the intermediate conclusions given in the analysis of the argument on page 5 of this mark scheme.
- Identification of one of those intermediate conclusions, together with recognition that Strand 3 of the reasoning involves showing that the opposing argument leads to a ridiculous conclusion.
- Identification of one of those intermediate conclusions and at least two of the unstated assumptions given in the analysis of the argument on page 5 of this mark scheme.

**Total marks for Question 3: 17**