MARK SCHEME for the May/June 2014 series

9694 THINKING SKILLS

9694/21 Paper 2 (Critical Thinking), maximum raw mark 45

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners’ meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.
1 (a) How significant is the advertisement in Source B in relation to the fire which damaged Litho Hall and caused it to be demolished? [3]

The advertisement has no direct connection with the incident [1], but the restrictions imposed on potential purchasers (show why no one is likely to buy it) [1] and thereby indicate a motive for burning it down [1] in order to be able to sell the empty site [1].

(b) How reliable is the evidence of Councillor Fox regarding the likely cause of the fire, as reported in Source D? [3]

(Very) unreliable/not very reliable [1]. He has a vested interest to blame someone else for starting the fire in order to exculpate himself [1]. If his evidence is true, he was not present at the Hall when the fire was started, and therefore has poor ability to see [1]. His claim that gangs of youths were responsible has very little corroboration [1].

(c) How significant is the evidence of the police spokesman in Source D in relation to the fire which damaged Litho Hall and caused it to be demolished? [3]

The reports of young people gathering in the park are consistent with Councillor Fox’s claim that “gangs of youths” set fire to Litho Hall [1], but the corroboration is very weak, because the reports are described as “unconfirmed” [1] and gathering in the park could easily have been quite innocent [1]. Graffiti on the Hall might indicate that young people wanted to damage the building [1], but nothing in the police report constitutes direct evidence that young people were responsible for deliberately setting fire to Litho Hall [1].

No mark for judgment.

(d) Who or what do you think caused the fire which damaged Litho Hall and caused it to be demolished? Write a short, reasoned argument to support your conclusion, with critical reference to the evidence provided and considering plausible alternative scenarios. [6]

<table>
<thead>
<tr>
<th>Level 3</th>
<th>5–6 marks</th>
<th>A strong answer, which provides a reasoned argument including thorough evaluation of the evidence to support an acceptable conclusion in terms of probability and evaluates the plausibility of at least one different possible course of events.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>3–4 marks</td>
<td>A reasonable answer, which evaluates the evidence, draws an acceptable conclusion in terms of probability and may mention the plausibility of at least one different course of events.</td>
</tr>
<tr>
<td>Level 1</td>
<td>1–2 marks</td>
<td>A weak answer, which refers to the evidence, possibly including a simple evaluative comment. The conclusion may be unstated or over-stated.</td>
</tr>
<tr>
<td>Level 0</td>
<td>0 marks</td>
<td>No credit-worthy material.</td>
</tr>
</tbody>
</table>

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Indicative Content
Councillor Fox had a strong motive to burn the Hall down and the speed with which he arranged for the Hall to be demolished following the fire is suspicious. So the most likely explanation is that he arranged for someone to set the Hall on fire. It is possible that a potential purchaser has caused the fire, in order to create a site for redevelopment, but it would have been more cost-effective if they did that after the purchase rather than in advance. Councillor Fox’s claim that a group of youngsters was to blame lacks corroboration but is possible. It is also possible, but unlikely, that the fire was accidental.

2 (a) Can it be reliably concluded from Source A that university students who were born early in the school year are likely to gain better degrees than those born at other times of the year? Briefly justify your answer. [2]

Correct judgment (No) with valid comment/explanation: 2 marks.
Correct judgment implied, with extended comment/explanation: 2 marks.
Correct judgment with vague/incomplete/marginal comment/explanation: 1 mark.
Valid comment/explanation without judgment: 1 mark.
Correct judgment without support: 0 marks.
Incorrect judgment with or without comment/explanation: 0 marks.

Indicative content
- It is plausible that the birthdate effect could continue into university, but there is no evidence in Source A to suggest that it does/it diminishes with increasing age.
- Maturity levels are likely to be the same by the time individuals reach university age.
- University students compete against people who have gained the same entry requirements as themselves, rather than against the whole year group.
- If people born at other times of the year have to be slightly more talented in order to gain a place at university than those born early in the school year, then they might be expected to perform better. [In fact, this is the case, but candidates are not expected to know that.]

(b) Suggest two possible explanations for why the effect of birth date on sporting ability does not disappear in adulthood. [4]

2 marks for each clear, valid answer. 1 mark for each vague, incomplete or marginal answer. 2 answers required.

Indicative content
- Players who show promise at school are likely to be selected for extra training and competition, which improves their skills.
- Players who show promise at school are likely to develop confidence in their own abilities, which continues into later life.
- Players who are selected for representative teams while at school are likely to come to the notice of scouts looking for talent on behalf of professional clubs.
- People who do not show sporting promise at school are likely to develop different interests.
(c) How effectively does the blogger in Source D respond to the claims in Sources A and B? [3]

Very ineffectively [1]. The research projects reported in Sources A and B refer to probability, not certainty [1]. So they are not disproved by the existence of exceptions [1]. The blogger is illegitimately generalising from the experience of herself and her daughter [1]. The issue is one of maturity, not cleverness or intelligence [1]. Sources A and B are about school and do not necessarily apply to university [1].

(d) ‘Parents who want to do the best for their children should ensure that they are born as close to September as possible.’

To what extent do you agree with this claim? Write a short, reasoned argument to support your conclusion, using and evaluating the information provided in Sources A–D. [6]

<table>
<thead>
<tr>
<th>Level 3</th>
<th>5–6 marks</th>
<th>A strong, reasoned argument, which uses and evaluates all or most of the evidence provided.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>3–4 marks</td>
<td>A reasonable, simple argument, which uses and/or evaluates evidence.</td>
</tr>
<tr>
<td>Level 1</td>
<td>1–2 marks</td>
<td>A weak answer, which makes some correct reference to evidence but consists of opinion and/or assertion rather than argument or a weak argument, which makes no reference to evidence.</td>
</tr>
<tr>
<td>Level 0</td>
<td>0 marks</td>
<td>No credit-worthy material.</td>
</tr>
</tbody>
</table>

Indicative content

- Applies to people educated in the UK but not in Southern Hemisphere.
- Close to = after, not before (August is “close to September”).
- Source A supports (intellectual)
- Source B supports (sport)
- Source C supports (lifelong consequences)
- Source D is a weak argument
- but reminds there are many exceptions.
- Other factors may be more significant.
3 (a) Using the exact words from the passage as far as possible, identify the main conclusion. [2]

2 marks: (For all these reasons) Esperanto should be adopted as the international language.
1 mark: Esperanto should be adopted.
1 mark: Paraphrase of the 2-mark answer.

(b) Using the exact words from the passage as far as possible, identify three reasons used to support the main conclusion. [3]

- The introduction of a single language would bring about world peace.
- (However,) to use any existing language for international communications is doubly unfair on the speakers of other languages.
- Of all the languages devised for international use, Esperanto is the most suitable.
- There would be big educational advantages in introducing Esperanto into the school curriculum.
- That [at first it will be of little use to them] is a very weak objection.

(c) Evaluate the strength of the reasoning in the argument. In your answer you should consider any flaws, unstated assumptions and other weaknesses. [5]

Marks for each evaluative point as follows, up to a maximum of 5 marks:

3 marks Key evaluative point, clearly expressed.
2 marks Key evaluative point, incompletely or vaguely expressed
or Valid evaluative point, clearly expressed but less significant than a key point.
1 mark Weak attempt at a valid evaluative point.

Candidates who achieve 0 or 1 marks for evaluative points may be awarded up to 2 marks for partial performance, as follows, in respect of answers which have misinterpreted the nature of the task but have shown some understanding:

2 marks: Relevant extended counter-argument/agreement or multiple specific counter-assertions/agreements.
1 mark: General counter/agreement or single specific counter/agreement.

Partial performance marks must not be added to one another or to marks from the main part of the mark scheme.

Paragraph 1

- [KEY] Slippery slope: it is highly unlikely that the introduction of an auxiliary language is sufficient to bring about world peace.
- [KEY] The reasoning in the last sentence relies on equivocation in the word “misunderstanding”.
- Assumption: that there are no causes of war other than misunderstanding (this point can alternatively be expressed in terms of necessary and sufficient conditions; allow 1 mark for interpreting this point as “restricting the options”).
- Assumption: that world leaders would become sufficiently skilled in the international language to eliminate misunderstandings.
Paragraph 3
- Assumption: that the artificial language to be adopted should be one which already exists, rather than being constructed new for the purpose.
- Assumption: that simple grammar and familiar vocabulary make a language easy to learn.

Do not credit an appeal to popularity in this paragraph, because in this case the appeal is valid and therefore not a flaw or weakness in the reasoning.

Paragraph 4
- Assumption: that there is an educational value in learning a language (independent of the use of the language itself).

Paragraph 5
- “The only reason…” restricts the options.
- The second sentence is ad hominem.
- Of the three examples, telephones and the Internet do illustrate the point well, but cars do not.
- [KEY] By reasoning backwards from inventions which did eventually become popular, the author avoids considering the possibility that some new methods of communication might never become popular.

Allow 1 mark for apparent contradiction between paragraphs 3 and 5: Esperanto has “far more” or “so few” speakers.
Allow 1 mark for inconsistency between paragraphs 2 and 3: the international language should not be a natural language, but Esperanto “draws its vocabulary from natural languages”.

(d) ‘All children should learn a foreign language at school.’

Write your own short argument to support or challenge this claim. The conclusion of your argument must be stated. [5]

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<tr>
<th>Level 3</th>
<th>4–5 marks</th>
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<tbody>
<tr>
<td></td>
<td>Developed, coherent argument. Reasons strongly support conclusion.</td>
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<tr>
<td></td>
<td>Development may include intermediate conclusion or apt examples.</td>
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<td></td>
<td>Simply structured argument 4 marks. Effective use of IC etc. 5 marks.</td>
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<thead>
<tr>
<th>Level 2</th>
<th>2–3 marks</th>
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<tbody>
<tr>
<td></td>
<td>A simple argument. One reason + conclusion 2 marks.</td>
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<td></td>
<td>Two or more separate reasons + conclusion 3 marks.</td>
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<thead>
<tr>
<th>Level 1</th>
<th>1 mark</th>
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<td></td>
<td>Some relevant comment.</td>
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<td>No relevant comment.</td>
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</table>

Maximum 3 marks for wrong conclusion or if conclusion is implied but not stated.
Maximum 3 marks if reasoning supports some children learning foreign languages, but not all.
No credit for material merely reproduced from the passage.
Indicative content (specimen level 3 answers)

Support [102 words]
Advances in travel and in communication technology have affected everyone. We now all live in a global community. Only one barrier remains: language. The ability to understand and speak a foreign language is essential for anyone who wants to participate fully in the global community.

The ability to communicate in a foreign language is particularly important for people involved in business. There need be no limit to the ambitions of those who can communicate easily with all their potential customers round the world, without being held back by not knowing their language.

Therefore all children should learn a foreign language at school.

Challenge [117 words]
Computers are now so important for work, learning and leisure that information technology has become an essential part of the school curriculum. In order to make room for it, another subject must go, and languages are the obvious choice.

Many of the subjects which are studied at school are of some use even at an elementary level of achievement. Simple arithmetic, for example, is an essential life skill for everyone. But foreign languages are useless to everyone except those who have a talent for languages and study them to a high level. For most people, therefore, attempting to learn a foreign language is a waste of time.

Therefore not all children should learn a foreign language at school.