

THINKING SKILLS

Paper 9694/21
Critical Reasoning 21

General Comments

Overall, the examination induced a wide range of responses and performances. Nearly all candidates had sufficient time to complete the paper.

A significant difference between candidates who achieved high and low marks was that the higher-achieving candidates clearly understood the passages and the questions, whereas some of the weaker candidates appeared to have problems in comprehension.

Although the skills tested in this examination are those which candidates may have developed through their other subjects, it would be wrong to imagine that they do not need to be prepared specifically for this examination. They need guidance and practice in answering the kinds of questions which occur in this examination. Teachers are strongly encouraged to study the indicative content given in the Mark Scheme, because this indicates the kind of answers which are expected in response to various kinds of question. Particular forms of question do tend to recur from session to session.

Comments on specific questions

Question 1

In part **(a)**, many candidates achieved 3 marks by explaining why James Caldicott's evidence in Source D was unreliable. The most popular answer was his refusal to answer the question concerning the allegations of sexual harassment.

In response to part **(b)**, many candidates recognized that the source of the email was unknown and that it confirmed the fact that certain allegations had been made, not that they were true, but a significant minority wrongly claimed that Rebecca wrote it and/or that it proved the allegations were true. Few candidates if any spotted the lack of corroboration with Source A.

Part **(c)** was quite hard, and only the best candidates gained full marks. Some candidates discussed the reliability of the claim instead of its relevance.

Part **(d)** was slightly complicated on this occasion, but most candidates recognized that the question combined two issues and dealt with both, even if perfunctorily. The amount of material to be considered was manageable, but many candidates were so sympathetic to Rebecca Leopard that they failed to evaluate the source material. Almost all candidates believed that Caldicott was guilty of sexual harassment and that Rebecca had therefore not spread "untrue" claims about him. Many answers tried to draw an inference from the fact that Rebecca resigned from the post when her conduct was called into question, but some thought it confirmed her guilt and others her innocence.

Question 2

In response to part **(a)**, most candidates explained why such evidence was relevant (because of evolution, shared DNA or shared instincts), and some explained why it was not, but only the best answers saw both sides. Some candidates claimed the evidence from chimps and hunter gatherers was relevant because the behaviour was similar, failing to realize that this reasoning was circular.

In part **(b)**, most candidates scored 2 marks, but some made the right judgment without explaining it correctly, and a few thought the two statements were contradictory. A small number of candidates claimed that the statements were contradictory because they were both true, which suggested problems of comprehension.

Within the context of this examination, answers to part **(c)** were expected to be superficial, and were not penalized for being so. Nearly everyone was able to come up with an idea and to explain it to some extent. Most candidates scored 3 marks, but a few achieved 1, 2 or 4.

In part **(d)**, many candidates achieved Level 2, by making some use of the resource documents in their arguments. A few reached Level 3, by evaluating the sources for their arguments. Unsurprisingly, by far the more popular answer was that human conflict could not be avoided.

Question 3

Part **(a)** was quite difficult on this occasion. The most popular answer was “Nature is a nasty, messy business and so our lives are better for being unnatural.” Not only is this not the main conclusion, but it is not a single element, consisting of a reason and an intermediate conclusion.

In part **(b)**, many candidates paraphrased or summarized sections of text instead of copying out the reasons.

As on previous occasions, not many candidates achieved high marks on part **(c)**. Most candidates limited their evaluation to explaining why they agreed or disagreed with the argument rather than drawing attention to flaws, weaknesses or questionable assumptions; answers of that kind could achieve a maximum of 3 marks out of 6. Typical expressions were “The author fails to mention...”, or “However, in fact...”. A few of the best candidates correctly identified the questionable implicit definition of “natural” as the key weakness in the argument.

Very few candidates interpreted “medicine” in part **(d)** as an abstract noun. Not much can be written to support the claim if “medicine” is understood as a concrete noun, and most candidates wrote more or less the same as one another. Very many candidates achieved 3 marks, but not many scored higher.

THINKING SKILLS

Paper 9694/22
Critical Reasoning 22

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Comments on specific questions

Question 1

In part **(a)**, many candidates achieved 3 marks by explaining why the police report was unreliable. Vested interest and the changing story were (rightly) the two most popular reasons. Weak answers failed to be sceptical about the claims put forward by the police. Some candidates failed to realize that the pathologist's report was part of the document and therefore could not corroborate it.

Part **(b)** was difficult, largely because the question asks which of two witnesses was more useful, but both were almost entirely useless. Only the most able candidates achieved 3 or 4 marks, although many managed to get 2. A lot of candidates wrote quite lengthy answers consisting mainly or entirely of irrelevant comments. Some candidates summarized the evidence without drawing any inference from it. Very few candidates saw that the comment about the friend's death in a race was of any use at all.

Part **(c)** produced a range of different responses. The best answers struck a balance, giving reasons why the video was of some value without being decisive.

Part **(d)** was quite difficult on this occasion, because there was a lot of material to consider. Most candidates tried to comment on all the sources, but a better strategy would have been to take a minute or two to think about the issue and then select the key points. Although the question of whether Jenufa participated in the protest or became caught up in it against her will is particularly interesting, and some of the better candidates focused on it, it is strictly marginal to the question of whether the police caused her death or not. The most common weakness in responses to this part-question was a lack of persuasive connection between the evaluation of the sources and the judgment. In their answers to part **(d)**, several candidates identified valid issues of credibility of sources which they had failed to mention in their answers to parts **(a)**, **(b)** or **(c)**. Some candidates did not distinguish between the meanings of "to blame" and "to be blamed", but this did not cause them much of a problem.

Question 2

Parts **(a)** and **(b)** were quite demanding, in that there was a right answer in each case (no and yes respectively), and candidates who opted for the wrong alternative scored 0.

Part **(c)** was quite difficult, because it depended on spotting that the result of the impact had not been stated. Good answers achieved 1 or 2 marks, but very few were awarded 3.

In part **(d)**, many candidates summarized the evidence from the sources and stated a view, but failed to make a convincing explicit connection between the summary and their judgment.

Question 3

Responses to parts **(a)** and **(b)** clearly separated the stronger and weaker candidates. Most candidates succeeded in identifying the main conclusion of this passage and one or two reasons, while a significant minority identified three reasons. With very few exceptions, those candidates who failed to achieve any marks in these two parts were those who also did least well on the other questions. In part **(b)**, many candidates paraphrased or summarized sections of text instead of copying out the reasons.

As on previous occasions, not many candidates achieved high marks on part **(c)**. Most candidates limited their evaluation to counter-argument, explaining why they disagreed with the argument rather than drawing attention to flaws, weaknesses or questionable assumptions, as is required by an 'evaluation'; answers of that kind could achieve a maximum of 3 marks out of 6. Typical expressions were "The author fails to mention...", or "However, in fact....".

Some weaker candidates identified the strengths and weaknesses of the topic according to the author, instead of evaluating the author's discussion. A significant minority summarized or analysed the argument instead of evaluating it, while some others gave their own opinions on the topic without explicit reference to the passage.

Most candidates still appear to think that an unstated assumption is an unsupported statement, rather than a missing link in an argument, an element which is essential to the argument but not stated. Teachers are earnestly encouraged to impress upon their candidates this specialized meaning of "assumption" in Critical Thinking, and to give them practice in identifying and evaluating assumptions. As indicated in the Mark Scheme, there were some significant assumptions in this passage, which did weaken the argument, and a few candidates drew attention to them.

Part **(d)** was done well by most candidates, although not many achieved 5 marks. The subject was suitable for a slightly developed discussion. The key factor in achieving 5 marks out of 5 was usually to incorporate a well-supported intermediate conclusion into the discussion. The few inadequate answers consisted of general comments unrelated to the specific conclusion required.

THINKING SKILLS

Paper 9694/23
Critical Reasoning 23

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THINKING SKILLS

Paper 9694/41
Applied Reasoning 41

General comments

Overall, candidate performance has seen an improvement on last June's session. Further, unlike in the last session, the majority of candidates did complete all three parts of **Question 3**. However some evidence still points to the impression that time management continues to affect performance, since the few candidates who did work through **Questions 1** and **2** completely to achieve the correct answers appeared unable to complete **Question 3**.

Analysis showed that candidates performed best in **Question 2** (Problem Solving) and nearly as well on **Question 3(c)** (Critical Thinking).

Comments on specific questions

Question 1

As in previous sessions, a substantial number of candidates scored poorly on this question, although more candidates attempted **Question 1** than in the last session. Most candidates were able to access the question, and began to investigate the problem. About a half did score some marks, by attempting parts **(a)**, **(b)** and **(c)**, which was an improvement on previous sessions. A popular choice for those who are aware of the difficulties of this open-ended question, given the time pressures, is to leave it to the end of the paper.

- (a)** A good number of candidates were able to answer this question correctly, although several gave the answer 40, failing to take account of the third condition, that some cakes of each recipe would be made.
- (b)** This question was intended to allow those who appreciated the logical structure of the problem to check they had done so correctly. A fair number who understood were able to work their way through to the correct answer, laying out their workings to view, with good spacing and using explanatory words such as 'therefore' as part of their workings.
- (c)** This question was off the main path of the question, and required candidates to understand the dynamics of the "more than half" restriction when applied to all three chefs. A common wrong answer was 15, although a reasonable number of candidates were able to calculate the correct answer here. A mistake at this point did not hamper candidate's progress with part **(d)**.
- (d)** This question, as is usual towards the end of **Question 1**, required a careful and logical approach in order to progress towards the solution, which very few candidates reached. There are marks put aside for taking such an approach, but they require a clear and detailed investigation to be earned. When attempting this part of the question, it is vital to lay out any initial attempts clearly in order to access the marks. It is often strategically advantageous to move to other parts of the paper if an answer is not forthcoming, which a number of candidates did. Very few candidates gained full credit here, and many, after struggling to get to the right answer by a trial and error approach, abandoned their attempts and moved on, often gaining a method mark. A common weakness was that candidates tended not to specify how many of each person's recipe would be made.

Question 2

This proved to be a relatively accessible problem-solving question. There was wider distribution of marks here and the majority of candidates gained at least half the full marks for this question.

- (a) & (b) Almost all candidates managed to locate this information from the table. Shot put and Javelin were the most common incorrect answers for part (a)(i), both of which involved missing out **one** of her competitors. Candidates are encouraged to write on or highlight their question papers when extracting information like this.
- (c) Although this question required more creative processing of data, it was performed correctly by most candidates in part (i); slightly lower numbers, though still the majority, answered part (ii) correctly.
- (d) Candidates did not perform as well in the final part of **Question 2** as in the previous session. About 20% of candidates managed to suggest a distance which conformed to the logic of the table. The most commonly seen incorrect answers were in the range 5.44 to 5.45, which suggested either a miscalculation, or an “intuitive” assault on the question.

Question 3

There was far more spontaneous engagement with the topic than in the previous session, generating interesting and relevant discussions and further arguments. Again, a considerable number of candidates appeared to have devoted perhaps too much time to the Problem Solving questions earlier in the paper. The vast majority of candidates appeared enthused by this question; the stimulus sources encouraged a range of differing perspectives, judging by the ease with which relevant citations were made. Many were able to read the statistical data of document 5 and render creditworthy interpretations. However, there is still much to be desired in the demonstration of competence in the Critical Thinking skills, which is the target assessment objective.

- (a) Very few candidates were able to identify the main conclusion; more than half achieved less than 2 marks. A reasonable number gained limited credit by misidentifying the intermediate conclusion that led to the main argument as the main conclusion, i.e. *“By dictating what counts as ‘free speech’ and what counts as ‘hate speech’ the true concept of free speech is destroyed.”* However, by stopping here they lost full credit, since they failed to understand that this sub-conclusion ultimately leads to the crucial argument that becomes the main conclusion: *“We should never enter into debates about what is free speech and what is hate speech”*. There were a significant number of candidates who did not understand that analysing the structure of a given passage or stimulus material in a Critical Thinking exercise is quite a different task from undertaking literary critical analysis of the piece. Such candidates laboriously analysed Document 1 in terms of its literary features, or merely gave a summary, sadly gaining no more than a gist mark. Candidates should be very clear that Critical Thinking and Literary Criticism are not identical operations, as this confusion has been evident from session to session. Some other candidates went on to evaluate the source for its flaws and weaknesses which is actually the task demanded by part (b) and not by part (a). It is important that candidates demonstrate that they understand the indicative terms ‘main conclusion’, ‘counter–argument’ and ‘intermediate conclusion’ by precisely labelling these component parts correctly, in laying bare the structure of the argument in Document 1, as the question clearly asks them to do.
- (b) As usual, candidates found this key Critical Thinking task hard, very few managing the three developed points which would win full marks. More than half of all candidates gained no marks. The majority of candidates failed to understand the term ‘assumption’ in the Critical Thinking sense – i.e. as the unstated reason underlying a claim or conclusion. For example, stating that *“Lee assumes that hate speeches will cause extremism”* or that *“Lee assumes pornographic expressions lead to rape”* gets no mark since the candidate is mistakenly identifying a slippery slope fallacy as an assumption. In being required to accurately evaluate strengths and weakness, candidates are expected to demonstrate the Critical Thinking competencies specified in the CIE syllabus, i.e. CT4, 5, 6, 7, 8 and 9. A key critical thinking competence tested in this question was whether the candidate had picked up on the confusion of cause and correlation – several were able to identify this, but not the majority. As in previous years, the mark scheme did not credit such assertions or counter-assertions as *“the author failed to consider ‘x’”* or *“the author has produced no evidence /proof”* as weaknesses. The majority seemed to think they were being asked whether they agreed or disagreed with Tan and Lee, and confined themselves to elaborating on this.



Explanations of Mill's, Tan's or Lee's views, annotations or summaries of what they stated gained no credit, since this was not what the question asked. Candidates who identified strengths and weaknesses using the Critical Thinking criteria were usually precise and to the point, identifying the flaw (1 mark), and developing the point (2 marks). Overall the advice to candidates is that this question requires accuracy, precision and clarity in order to gain credit.

- (c) This extended test of applied reasoning skills was better attempted than in previous sessions. What is commendable in this session is that, despite the strictures of time, the majority of candidates managed to extract relevant material from secondary sources without being sidetracked by the detail. There was markedly less digression and deviation than in previous sessions. Another commendable feature was that most candidates were less one-sided in constructing reasoned arguments than in the past. On the whole, most offered a clear conclusion or implied their conclusion coherently. However on the issue of demonstrating the higher order skill of critical reasoning, as is expected at A level, many candidates were still not able to critically compare and contrast material from the various stimulus sources they were presented with, nor draw and synthesise inferences. Rather they limited themselves to implicitly countering stray and slender strands of evidence from the documents, or simply re-stating the reasons uncritically. References to UN Article 19 were rather thin on the whole; several simply cited or treated it as no more than a passing reference allowing little impact on their further arguments, which, however, were more often than not interesting and original. Candidates need to be able to make focused and sustained critical comments, rather than quoting sources as though they were the 'undeniable truth.' Stronger candidates referred to at least three documents in demonstrating critical reasoning skills which gained them upper-middle band marks (11-14). As in previous sessions, it remains the case that very few candidates were able to explicitly anticipate counter-arguments to their own viewpoint/s or argument, a skill which is requisite for attaining the upper-top band of marks (18-20).

THINKING SKILLS

Paper 9694/42

Applied Reasoning 42

General comments

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- (a)** A good number of candidates were able to answer this question correctly, although several gave the answer 40, failing to take account of the third condition, that some cakes of each recipe would be made.
- (b)** This question was intended to allow those who appreciated the logical structure of the problem to check they had done so correctly. A fair number who understood were able to work their way through to the correct answer, laying out their workings to view, with good spacing and using explanatory words such as 'therefore' as part of their workings.
- (c)** This question was off the main path of the question, and required candidates to understand the dynamics of the "more than half" restriction when applied to all three chefs. A common wrong answer was 15, although a reasonable number of candidates were able to calculate the correct answer here. A mistake at this point did not hamper candidate's progress with part **(d)**.
- (d)** This question, as is usual towards the end of **Question 1**, required a careful and logical approach in order to progress towards the solution, which very few candidates reached. There are marks put aside for taking such an approach, but they require a clear and detailed investigation to be earned. When attempting this part of the question, it is vital to lay out any initial attempts clearly in order to access the marks. It is often strategically advantageous to move to other parts of the paper if an answer is not forthcoming, which a number of candidates did. Very few candidates gained full credit here, and many, after struggling to get to the right answer by a trial and error approach, abandoned their attempts and moved on, often gaining a method mark. A common weakness was that candidates tended not to specify how many of each person's recipe would be made.



Question 2

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- (b) As usual, candidates found this key Critical Thinking task hard, very few managing the three developed points which would win full marks. More than half of all candidates gained no marks. The majority of candidates failed to understand the term ‘assumption’ in the Critical Thinking sense – i.e. as the unstated reason underlying a claim or conclusion. For example, stating that *“Lee assumes that hate speeches will cause extremism”* or that *“Lee assumes pornographic expressions lead to rape”* gets no mark since the candidate is mistakenly identifying a slippery slope fallacy as an assumption. In being required to accurately evaluate strengths and weakness, candidates are expected to demonstrate the Critical Thinking competencies specified in the CIE syllabus, i.e. CT4, 5, 6, 7, 8 and 9. A key critical thinking competence tested in this question was whether the candidate had picked up on the confusion of cause and correlation – several were able to identify this, but not the majority. As in previous years, the mark scheme did not credit such assertions or counter-assertions as *“the author failed to consider ‘x’”* or *“the author has produced no evidence /proof”* as weaknesses. The majority seemed to think they were being asked whether they agreed or disagreed with Tan and Lee, and confined themselves to elaborating on this.



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THINKING SKILLS

Paper 9694/43

Applied Reasoning 43

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Question 2

This proved to be a relatively accessible problem-solving question. There was wider distribution of marks here and the majority of candidates gained at least half the full marks for this question.

- (a) and (b) Almost all candidates managed to locate this information from the table. Shot put and Javelin were the most common incorrect answers for part (a)(i), both of which involved missing out **one** of her competitors. Candidates are encouraged to write on or highlight their question papers when extracting information like this.
- (c) Although this question required more creative processing of data, it was performed correctly by most candidates in part (i); slightly lower numbers, though still the majority, answered part (ii) correctly.
- (d) Candidates did not perform as well in the final part of **Question 2** as in the previous session. About 20% of candidates managed to suggest a distance which conformed to the logic of the table. The most commonly seen incorrect answers were in the range 5.44 to 5.45, which suggested either a miscalculation, or an “intuitive” assault on the question.

Question 3

There was far more spontaneous engagement with the topic than in the previous session, generating interesting and relevant discussions and further arguments. Again, a considerable number of candidates appeared to have devoted perhaps too much time to the Problem Solving questions earlier in the paper. The vast majority of candidates appeared enthused by this question; the stimulus sources encouraged a range of differing perspectives, judging by the ease with which relevant citations were made. Many were able to read the statistical data of document 5 and render creditworthy interpretations. However, there is still much to be desired in the demonstration of competence in the Critical Thinking skills, which is the target assessment objective.

- (a) Very few candidates were able to identify the main conclusion; more than half achieved less than 2 marks. A reasonable number gained limited credit by misidentifying the intermediate conclusion that led to the main argument as the main conclusion, i.e. *“By dictating what counts as ‘free speech’ and what counts as ‘hate speech’ the true concept of free speech is destroyed.”* However, by stopping here they lost full credit, since they failed to understand that this sub-conclusion ultimately leads to the crucial argument that becomes the main conclusion: *“We should never enter into debates about what is free speech and what is hate speech”*. There were a significant number of candidates who did not understand that analysing the structure of a given passage or stimulus material in a Critical Thinking exercise is quite a different task from undertaking literary critical analysis of the piece. Such candidates laboriously analysed Document 1 in terms of its literary features, or merely gave a summary, sadly gaining no more than a gist mark. Candidates should be very clear that Critical Thinking and Literary Criticism are not identical operations, as this confusion has been evident from session to session. Some other candidates went on to evaluate the source for its flaws and weaknesses which is actually the task demanded by part (b) and not by part (a). It is important that candidates demonstrate that they understand the indicative terms ‘main conclusion’, ‘counter–argument’ and ‘intermediate conclusion’ by precisely labelling these component parts correctly, in laying bare the structure of the argument in Document 1, as the question clearly asks them to do.
- (b) As usual, candidates found this key Critical Thinking task hard, very few managing the three developed points which would win full marks. More than half of all candidates gained no marks. The majority of candidates failed to understand the term ‘assumption’ in the Critical Thinking sense – i.e. as the unstated reason underlying a claim or conclusion. For example, stating that *“Lee assumes that hate speeches will cause extremism”* or that *“Lee assumes pornographic expressions lead to rape”* gets no mark since the candidate is mistakenly identifying a slippery slope fallacy as an assumption. In being required to accurately evaluate strengths and weakness, candidates are expected to demonstrate the Critical Thinking competencies specified in the CIE syllabus, i.e. CT4, 5, 6, 7, 8 and 9. A key critical thinking competence tested in this question was whether the candidate had picked up on the confusion of cause and correlation – several were able to identify this, but not the majority. As in previous years, the mark scheme did not credit such assertions or counter-assertions as *“the author failed to consider ‘x’”* or *“the author has produced no evidence /proof”* as weaknesses. The majority seemed to think they were being asked whether they agreed or disagreed with Tan and Lee, and confined themselves to elaborating on this.



Explanations of Mill's, Tan's or Lee's views, annotations or summaries of what they stated gained no credit, since this was not what the question asked. Candidates who identified strengths and weaknesses using the Critical Thinking criteria were usually precise and to the point, identifying the flaw (1 mark), and developing the point (2 marks). Overall the advice to candidates is that this question requires accuracy, precision and clarity in order to gain credit.

- (c) This extended test of applied reasoning skills was better attempted than in previous sessions. What is commendable in this session is that, despite the strictures of time, the majority of candidates managed to extract relevant material from secondary sources without being sidetracked by the detail. There was markedly less digression and deviation than in previous sessions. Another commendable feature was that most candidates were less one-sided in constructing reasoned arguments than in the past. On the whole, most offered a clear conclusion or implied their conclusion coherently. However on the issue of demonstrating the higher order skill of critical reasoning, as is expected at A level, many candidates were still not able to critically compare and contrast material from the various stimulus sources they were presented with, nor draw and synthesise inferences. Rather they limited themselves to implicitly countering stray and slender strands of evidence from the documents, or simply re-stating the reasons uncritically. References to UN Article 19 were rather thin on the whole; several simply cited or treated it as no more than a passing reference allowing little impact on their further arguments, which, however, were more often than not interesting and original. Candidates need to be able to make focused and sustained critical comments, rather than quoting sources as though they were the 'undeniable truth.' Stronger candidates referred to at least three documents in demonstrating critical reasoning skills which gained them upper-middle band marks (11-14). As in previous sessions, it remains the case that very few candidates were able to explicitly anticipate counter-arguments to their own viewpoint/s or argument, a skill which is requisite for attaining the upper-top band of marks (18-20).