



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education
Advanced Level

THINKING SKILLS

Paper 4 Applied Reasoning
SPECIMEN MARK SCHEME

9694/04

For Examination from 2011

1 hour and 30 minutes

MAXIMUM MARK: 50

This document consists of **8** printed pages.



1 (a) Identify three points that weaken the credibility of the statistics in the second paragraph. [3]

Credit of **one mark** will be given to each distinct, clearly-put, accurate and relevant comment relating to flaws in the accuracy, reliability, sampling, relevance, significance, comparability or interpretation of the statistics or statistical inferences in the passage. For example:

- The number of people possessing a gun without a licence cannot be measured precisely, yet a very precise figure is given for its percentage increase.
- Population is rounded to the nearest million (yet an accurate figure is likely to be available from an official census), while a very precise figure of 572.75% is given for the increase in the number of people possessing a gun without a licence.
- The percentage given for population increase is annual, but the percentage given for the number of people possessing a gun without a licence is for a twenty-year period.
- There is no baseline figure given for illegal gun possession, making interpretation of the significance of the percentage increase difficult. If illegal gun possession was already substantial in 1989, then this will be more of a problem today than if possession was very low in 1989. For population both a baseline (32 million now) *and* a percentage increase over a period (1% over 20 years) are given.
- The 700% increase in deaths caused by guns in Elliottsville may be a very misleading statistic. If only 1 person was killed by a gun in 2007 (a credible figure), but there was a one-off event which killed 8 people in 2008, then there is no reason to suppose that 8 or more people will be killed in subsequent years. 2008 may be an *atypical* year.
- The 700% increase in deaths caused by guns in Elliottsville may be unrelated to the general rise in *illegal* guns; all of these deaths may have been caused by legally-possessed guns.
- “*Some parts of the country have been affected more than others*”. This is an invalid connection. There may have been no increase (or even a decrease) in the number of illegal guns in Elliottsville in 2008. The ‘number of deaths caused by guns’ is a different statistic.
- “*This has left most ordinary law-abiding citizens living in fear*”. The word ‘most’ entails that at least 50% of the population are living in fear, and there is no evidence to support this.
- The views of Beth Jebbett may not be representative of the whole population of Elliottsville, yet her comment is taken to be so.

[Max 3]

- (b) ‘...lust for material possessions such as TVs has led to more people possessing illegal guns.’

Do you think that the evidence in the third paragraph is sufficient for this inference to be drawn? Justify your answer briefly. [2]

Award **1 mark** for each distinct relevant point made. For example:

- The passage states that “*experts believe...*” but the view of only one ‘expert’ is given. Who qualifies as an ‘expert’ in the context given? Is the National Centre for Criminal Studies influenced by, or even dictated, to by the Government? On the other hand, being a ‘National’ institution, it may well be a reputable and authoritative body which gathers and studies evidence of gun crimes, therefore increasing credibility of claim.
- The newspaper may be quoting only part of what Dr Kinski said. Asked a closed question such as, “Is it true that possession of illegal guns and ownership of flat-screen television sets is correlated?” he may have agreed, but then gone on to say that this does not tell us much.
- Correlation is conflated with causation: a correlation between the two variables does not imply that wider ownership of flat-screen TVs has *caused* an increase in illegal gun possession.
- There is no other corroborative opinion or evidence put forward to support Dr Kinski’s assertion that there is a correlation between the two variables.
- It is assumed that the “correlation” asserted by Dr. Kinski is *positive*, when he has not specified whether it is in fact positive or negative.
- There is again conflation of legal and *illegal* gun possession in the presentation of the case.

[Max 2]

2 Provide a brief analysis of the structure of Loh Kang's argument in Document 1: The Myth of Equality. [6]

Main conclusion: Nature will favour women in tomorrow's world.

Reasoning:

R – Women are better at listening and comprehending than men.

R – Men are competitive but women are co-operative.

R – The challenges of the 21st century require a co-operative approach to resolve world conflicts.

IC1 – Women are more able to resolve disagreements in a constructive way.

R – Men may be physically stronger but women have greater stamina.

R – Women have a greater capacity for coping with pain.

IC2 – Women have qualities that mark them out as the superior sex.

R – Soon women will be able to conceive babies without men.

IC3 – Men are not needed for the continuance of the human race.

R – Women can multi-task, are more flexible and are good at sense-making.

IC4 – Women can do things better than men.

Therefore (from IC1–4), follows

IC5 – Women are intrinsically superior to men.

CA – Because women have had to devote so much energy to assert themselves and demand equal rights, they can't be naturally superior.

Marks:

Summary or general direction of argument [reasons w/o any ICs] – 1

Conclusion + gist or 1 IC – 2

Conclusion + 2 IC – 3

Conclusion + 3 IC – 4

Conclusion + 4 IC – 5

Conclusion + 5 IC – 6

[treat identification of the CA the same as identification of an IC]

Candidates who misidentify the MC (for instance, using IC5) should be capped at 4 marks [and the other available marks scaled down by 2/3]

[Max 6]

3 Give a critical evaluation of Loh Kang's reasoning, assessing any strengths and weaknesses and any implicit assumptions made. [9]

There are several weaknesses which may be discerned in the reasoning. Overall the conclusion is overly strong. It is too one-sided, with very little evidence cited to support the claims. Conclusions are drawn through many generalisations/fallacies/sweeping claims and none of the reasons support the main conclusion with respect to what nature will favour in tomorrow's world.

The conjecture/hypothetical reasoning in paragraph 1 is unrealistic/unsound. **Not all social systems that hold women back have been set up by men** – the fact that there are matriarchal systems in many cultures that bind women to occupy subordinate places in society has not been acknowledged. Unenlightened universal humanity has to take some blame.

None of the social systems of males Loh Kang refers to in the first paragraph is cited in the rest of the argument.

Loh Kang wholly ignores the fact that **many male-dominant government/social agencies have also been fostering women's rights** e.g. positive discrimination (affirmative action) in work and education sectors, initiating reform of archaic institutions, introducing or enforcing legislation, empowering women's groups etc. Such interventions on women's behalf should give women opportunities to prove if they are intrinsically superior and allow for the conclusion, on evidence, that they indeed are so.

Examples of military force in the world do not rule out a male capacity to attempt to resolve conflict through cooperation.

Gender generalisations throughout the passage e.g. Men tend to set out to win an argument.

Setting out to win an argument and attempting to reach a rational conclusion based on healthy debate are not mutually exclusive.

The dynamics of power and status in the world are understood in narrow terms. **Being intrinsically better human beings does not constitute either a necessary or a sufficient condition to such people having dominance in the world.** The main conclusion that nature will favour women tomorrow is further weakened by the assumption that once social systems that facilitate gender inequalities have been exposed women's superiority will be recognised, whereas there may be other reasons why discrimination may continue e.g. religio-cultural notions, the concept of segregation, political exigencies etc. all of which may put restrictions on women which in actual fact compromise equal status with men.

Unstated assumption: **nature will favour intrinsic superiority.**

The assumption that **tomorrow's world will be significantly different.**

The author does not establish how the **positive qualities of women will be matched to the demands of tomorrow's world.**

The assumption that women do not resort to military force – untenable because history has shown many women leaders from recent past (Mrs Thatcher and Falklands episode, as well as other female world leaders – Indira Gandhi, Golda Meir, Bandaranaike, etc.) have sought to resolve conflicts by the use of military force.

Equivocation – physical strength and stamina – the two are not equivalent for comparison. Further **one example of childbirth does not validate a conclusion that men are not able to withstand pain equally or better than women** (candidates may produce several examples).

Unstated assumption: **stamina is superior/more important than physical strength.**

The comment about women's ability to conceive without men does not survive any scrutiny. Taken seriously it is utterly implausible. You may not need men for the act of conception, but you do need men to create sperm!

5th paragraph – **does not refer to whether men can 'multi-task' or demonstrate any of the other stated qualities.** All of the fifth paragraph can be construed as a Straw man argument.

Equivocation with respect to the definition of equality. [Conflating equality of opportunity with the concept of intrinsic equality]

Self-defeating/circularity: The argument is self-defeating. It posits, by implication, that women ought not to campaign for equal rights because they are intrinsically superior. But it does not project any action that women should take to win their case. **It leaves a dilemma behind – if women should do nothing, how will they be able to achieve equality in the future.**

Strength: **The argument is strong in its support of IC5** [women are intrinsically superior to men].

Marks

For each sound evaluative comment: one or two marks available, according to the significance and clarity of the point made.

[Max 9]

4 'Gender equality is possible.'

Commenting critically on some or all of the Documents (1)–(5), and introducing ideas and arguments of your own, construct a well-reasoned case *either for or against* the above statement.

You may use examples of gender inequalities from your own country or other countries.

[30]

Credit will be given for the **judicious use of the resources in the documents**.

Good answers should select textual data which not only support but challenge their own take on the debate.

Credit will be given for the **assessment and interpretation of evidence** in the sources. A good response should note the variable nature of interpretation i.e. that throughout history at appropriate stages of enlightenment re-interpretation has been going on, e.g. Document 2 v. Document 3. The statistical data in Document 5 can be used to support or challenge arguments or issues arising in the other documents. Higher band responses would have evaluated at least 4 documents.

Credit will be given for the inferences candidates draw from the sources and from other examples or observations they bring to the debate. The critical analysis and evaluation of gender prejudices should lead students to multiple sub-arguments and intermediate conclusions, but these should be consistent with the main conclusion. Documents 2, 3 and 4 focus on religions as agents of gender inequality, while Document 1 focuses on social studies. Better answers will register these complexities. Special knowledge in history, religious studies or sociology etc. may be brought to support reasoning (credit being given for the quality of reasoning not the knowledge content, (although this should not be erroneous as far as examiners can determine).

Good to excellent answers will, in varying degrees, desist from seeing the issue in black and white. To obtain higher marks, a candidate should be able to anticipate counter-positions. Perceptive responses would highlight some of the grey areas i.e. complexities raised by the issue of gender with reference to principles – e.g. that some people in some religions / cultures feel certain religious perceptions are 'facts' and to abolish them would take away fundamental life principles or mitigate quality of life for them. They may refer to debates of the tension between faith and reason and draw inferences to support their conclusion. They may discredit feminist movements or reactionary movements as unhelpful (in addition to Document 1), and as ruling out other options for redress. Balanced reasoning would acknowledge that human misconceptions will always remain inherent in human nature.

No additional marks will be given for subject knowledge (but where such is offered it should be reasonably correct), but only for the quality of the critical reasoning skill applied to such information, as relevant to question. No marks are reserved for the quality of written English.

Band	Overall	Within	Score
Band IV 27–30	Can consider counter-positions to own argument and reflect on implications in arriving at conclusion.	Developed consideration of counter-positions. Knows precisely what complexities face own argument.	30 29 27
		Simple statement of 1 or 2 counter-arguments to own argument.	
Band III 17–21 / 22–26	A critical stance: ideally an evaluation of sources, and explicit consideration of counter-arguments (or conflicting sources). Must reference 3 + documents.	Well-constructed, coherent argument. Candidates introduce their own ideas and arguments building their own position. Can compare and contrast documents and draw inferences synthesising arguments from different documents. Good interpretation of sources.	26 24 22
		Occasional explicit, precise / developed critical reasoning of 2+ points. Can compare and contrast documents relevantly.	21 19 17
Band II 07–11 / 12–16	A reasoned stance: a clear conclusion, supported by reasons clearly expressed but uncritically selected from the sources. Reference to at least 2 documents.	Some independent reasoning / Implicit critical reasoning. Clear statement of 3/4 reasons in support.	16 14 12
		Reasons indiscriminately selected. Little clear independent or no independent reasoning. Some irrelevance / deviation from the question. May be multiple conclusions with little support for each one.	11 09 07
Band 1 02–06 / 0–1	“Pub rhetoric”: unclear or no conclusion; reasoning that goes off question target at a tangent; substantial irrelevant material. Completely misunderstands the question.	Reproduced reasoning from the sources. Disorganised. Unconvincing attempts to construct reasoning.	06 04 02
		Stream of consciousness. Wholly irrelevant / deviant / incoherent material. No attempt.	01 0 0