Cambridge International AS & A Level

THINKING SKILLS **9694/23**

Paper 2 Critical Thinking **October/November 2022**

MARK SCHEME

Maximum Mark: 50

Published

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.

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This document consists of **12** printed pages.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

ANNOTATIONS

✔	In Qs 1, 3 and 4 use to indicate where marks have been awarded.
✖	Use to indicate an answer or element that is wrong.
NGE	Not good enough.
BOD	Benefit of doubt.
AE	In Q5 use to indicate creditworthy other argument element In Q 3 use to indicate significant additional element.
CON	In Qs 2 and 5 use to indicate conclusion.
C	In Qs 2 and 5 and in short questions where indicated, use to indicate that marks have been capped because an essential element of the answer is absent.
EVAL	In Q2 use to indicate creditworthy evaluation of a source.
I	In Q5 use to indicate creditworthy intermediate conclusion.
P	In Q2 use to indicate creditworthy personal thinking. In Q 3 use to indicate paraphrase.
R	In Q2 use to indicate creditworthy inferential reasoning. In Q5 use to indicate creditworthy reason used to support a conclusion.
S	In Q2 use to indicate creditworthy use of a source. In Q5 use to indicate distinct strand of reasoning.
∧	In appropriate cases, use to indicate significant omission. In Q 3 use to indicate significant omission.
SEEN	Use in answers when no other annotations have been used. Use on blank pages.
Highlight	Use to draw attention to part of an answer.

There must be at least one annotation on each page of the answer booklet.

Question	Answer	Marks
1(a)	*2-mark answers* • The men (in the sample) had higher IQs on average than the women (in the sample). • If one assumes that the sample was representative, then men in general are more intelligent than women. • The men may have lied about their opinion, in order to impress others. *1-mark answers* • Men have higher IQs than women. • The sample was not representative. • The men or the women or both lied about how intelligent they thought they were.	**2**
1(b)	*Award up to 4 marks from any of the following lines of explanation:* • Only students of middle ability were studied **[1]**. • Only one (scientific) subject was studied **[1]**. • Only students were studied **[1]**. • The results might have been different for a different group of people **[1]**. • The students were asked about their 'intelligence', but the conclusion is about 'ability' **[1]**, which might be a different thing **[1]**. • Individual / male and female students may have understood what is meant by 'intelligent' differently **[1]** so the data might not be reliable **[1]**. • We don't know the proportions of male and female students in the sample **[1]**, or how they were paired in the lab **[1]**. The students' self-assessments could have been accurate but still consistent with a situation where the females were actually more intelligent on average than the males **[1]**. • For the sub-group in the 'middle of the range of ability', it is likely that either there are too few of them **[1]** or there is still a significant range of ability **[1]**; either way the results are unlikely to be meaningful **[1]**. • The form of the responses for the second statistic is not stated, leaving several possibilities for error **[1]**. For example, if they were asked to give a percentage they were more intelligent than, they could have used different degrees of approximation **[1]** which would skew the results **[1]**.	**4**
1(c)(i)	*2 marks for a correct answer with accurate explanation* *1 mark for a correct answer with vague, incomplete or generic explanation* *0 marks for a correct answer without explanation* *0 marks for an incorrect answer with or without explanation* *2-mark answer* Source C is an argument. The second sentence is the conclusion, which is supported by (a reason and intermediate conclusion in) the first sentence and (an intermediate conclusion and reasons in) the third sentence. *1-mark answers* Source C is an argument, because it consists of a persuasive conclusion supported by reasons. Source C is an argument. The conclusion is the second sentence.	**2**

Question	Answer	Marks
1(c)(ii)	*2-mark answers* • It would be necessary to know that the proportion of male and female students studied was approximately equal. • It would be necessary to know that at least one third of the male and one third of the female students were paired with someone of the opposite sex. • It would be necessary to know that the comparative grades achieved by the students were / comparative intelligence of the students was consistent with their self-assessments. *1-mark answer* • It would be necessary to know the proportion of male and female students studied. • It would be necessary to know how many of the students were in mixed-gender pairs.	**2**
1(d)	The article identifies a known phenomenon which could be used to explain the alleged tendency for men to overestimate their own ability **[1]**, **although*** it does not relate it to gender **[1]**. The statement about the implications for recruitment and promotion shows why the issue is important **[1]**. **Award this mark **only** if 'although' or equivalent is present.*	**2**
1(e)	As the website of a political campaign, the source has relevant expertise **[1]**. Having referred to research, it has some ability to see **[1]**. Although the website is biased in favour of its objectives **[1]**, the objective of achieving parity between genders is by definition not biased **[1]**.	**2**

Question	Answer		Marks
2	**Conclusion**	1 mark for an explicit supported conclusion *Cap at 7 if conclusion is absent or implicit*	**8**
	Use of sources	2 marks for use of 4 or 5 sources 1 mark for use of 1 – 3 sources	
	Evaluation of sources	1 mark for each valid evaluation of the credibility or quality of reasoning in sources *Maximum 3 marks*	
	Inferential reasoning from sources	1 mark each *Maximum 3 marks* *Source must be mentioned for this to be credited*	
	Personal thinking	1 mark each *Maximum 2 marks*	

Annotate answers as follows:

CON   To indicate 'conclusion'.

S   To indicate creditworthy use of source.

EVAL   To indicate creditworthy evaluation of source.

R   To indicate creditworthy inferential reasoning.

P   To indicate creditworthy personal thinking.

C   To indicate that mark has been capped.

Indicative content
- Source A claims that men are more likely than women to exaggerate their own intelligence
- but the estimates were not compared with the results of intelligence tests.
- Source B claims that men are more likely than women to exaggerate their ability,
- but this claim is statistically very unreliable
- and even if true generalises on the basis of one (scientific) subject.
- Source C gives reason for doubting the claim in Source B,
- but relies on a dubious unstated assumption.
- Sources D and E explain why it matters if women are likely to underestimate their own potential by comparison with men.

Question	Answer	Marks
2	***Example 8-mark answer*** *296 words*	
	Issues of this kind pose **P** a dilemma, because generalising on the basis of sex or gender can be condemned as sexist, but declining or failing to do so can cause or condone injustice.	
	Source **S** A claims that men are more likely than women to exaggerate their own intelligence; if true, this **R** would be a good reason to encourage women to believe in their ability more than they tend to do at present, but the estimates were not compared **EVAL** with any objective measurements and it therefore does not necessarily follow that the men in the study were over-estimating their intelligence.	
	Source **S** B claims that men are more likely than women to exaggerate their ability, but (as explained in my answer to q 1b) this claim is statistically very unreliable **EVAL** and even if it is true, it generalises on the basis of one academic subject. As Source **S** C points out, it is possible that the results would be the opposite if a similar study were to be performed amongst students of English Literature, in which women may be more likely to excel.	
	Even though Source E is overtly biased **EVAL** in favour of women's rights, it persuasively identifies **S** cultural pressures which may push women into underestimating themselves, or at least behaving as if they do, and it explains how this behaviour disadvantages them. The last sentence of Source **S** D, too, shows why it matters if women underestimate their own potential by comparison with men. As information from an on-line encyclopaedia, this information is of moderate **EVAL** reliability, since anyone can add inaccurate information, but egregious errors are likely to be corrected by other users. Overall, it **R** seems that under present conditions many women are disadvantaged by underestimating themselves and they therefore should **CON** be encouraged to believe in their own ability.	

Question	Answer	Marks
	In q 3, annotate as follows: `AE` *Significant additional element* `^` *Significant omission* `P` *Paraphrase* *In q 3 a, c and d, if two answers are given, one of which is correct, award 1 mark.* *In all parts of q 3, apply guidance relating to additional material **only** if it constitutes an additional part of an answer or an alternative answer.*	
3(a)	*2 marks for an exact answer* *1 mark for a paraphrase, or for **one** additional element or omission* (and) policies of providing retirement pensions for all should now be abandoned.	**2**
3(b)	*For up to 2 of the following:* *2 marks for an exact answer* *1 mark for a paraphrase, or for **one** additional element or omission* *If more than two answers given, mark the first three only* • Everyone who is able to earn their own living should do so (whatever their age). • it [abolishing universal age-related pensions] will be fairer overall • It is unrealistic to expect tax-payers to meet the cost of universal pensions.	**4**
3(c)	*2 marks:* counter assertion (*accept* counter claim) *OR accurate description of counter assertion without naming it.* *1 mark:* counter (argument)	**2**
3(d)	*2 marks for an exact version of up to two of the following* *1 mark for an incomplete or vague version of up to two of the following* • Most people actually will receive their pensions for twenty or thirty years. • The birth rate / net immigration rate will not increase. • Life expectancy will not decrease. • National prosperity / typical incomes of employed persons will not greatly increase. • The age of retirement will not be increased. • The money raised from tax-payers is not sufficient to pay for pensions. • It would not be better to divert money from other areas of government spending to pay for pensions.	**4**

Question	Answer	Marks
4(a)	Earning one's living is conflated with work **[1]**. This weakens the reasoning because it is possible to develop one's talents, potential and self-respect by means of voluntary work or a hobby / because some work does not develop one's talents, potential and self-respect **[1].** *OR* Earning one's living is conflated with contributing one's fair share to the common good **[1]**. This weakens the reasoning because people who earn their own living are not necessarily contributing (their fair share) to the common good / one can contribute to the common good without earning one's own living **[1]**.	**2**
4(b)	In para 3, it is envisaged that the money saved from the withdrawal of universal age-related pensions will be re-applied to other parts of the welfare budget **[1]**, but para 4 implies that the tax burden on workers will be reduced by the amount saved **[1]**. This weakens the argument significantly, because the money cannot be used twice **[1]** but not fatally, since both policies are plausible and it would be possible to implement both policies in part **[1]**.	**4**
4(c)	The second sentence is an appeal to history/tradition) **[1]**. This significantly weakens the reasoning in this paragraph, because no reason is given as to why the original justification for universal retirement pensions should still apply today / this does not mean the function of pensions cannot change **[1]**.	**2**

Question	Answer		Marks
5	**Reasons**	2 marks for three or more reasons supporting conclusions 1 mark for one or two reasons supporting conclusions	**8**
	Inferential reasoning	1 mark for each use of an intermediate conclusion or chain of intermediate conclusions *(including if used in a response to a counter)* *Maximum 3 marks*	
	Argument elements	1 mark for each use of other argument elements that strengthens the reasoning: counter with response, example, evidence, analogy, hypothetical reasoning *Credit each type only once per strand of reasoning* *Maximum 3 marks*	
	Structure	1 mark for two or more distinct strands of reasoning	

Each component of a candidate response may score only once. Where there is more than one possibility, use the classification which leads to the higher total mark.

Maximum 6 marks for no conclusion or wrong conclusion, or a conclusion that does not follow from the reasoning, or if both sides are argued without a resolution.

0 marks for answer unrelated to the claim given.
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Annotate answers as follows:

CON   To indicate main conclusion.

R   To indicate creditworthy reason used to support a conclusion.

I   To indicate creditworthy intermediate conclusion.

AE   To indicate creditworthy other argument element.

S   To indicate distinct strand of reasoning.

C   To indicate that mark has been capped.

Question	Answer	Marks
5	***Example 8-mark answers*** *Support (159 words)* After the pressures of a working life, old age comes as a relief. By this stage, people have achieved all that they are going to accomplish, and the psychological pressure to make progress and achieve more is relaxed. If elderly people miss the challenges of their professional life, they can develop a hobby or take on voluntary work, such as helping to run a charity or visiting people who are confined to home. The role of grandparent is more rewarding and less stressful than parenthood, because it provides all the privileges of a family relationship without any of the responsibilities. Surveys have consistently shown that the main thing teenagers want from adult relatives is time, but many parents are too busy to give them this. Grandparents can fill this gap, by giving time to listen and offer advice based on their many years' experience. Therefore most people can expect old age to be the happiest time of their life. *Challenge (149 words)* Many people look forward to old age, because they think it will give them opportunities to spend more time on pleasurable activities, such as travel, entertainment and hobbies, but this is an unrealistic expectation. Sickness and the limitations of an aging body restrict the activities of most elderly people and medical appointments tend to dominate both their diaries and their thoughts. Youth and maturity should be happier times, because youth is a time of expectation and maturity brings greater fulfilment. Old age involves a loss of status. People who have previously held positions of responsibility usually find it difficult to handle such loss. One former deputy headteacher commented, 'Now I can't give orders to anyone except my dog.' Even those who have worked at more menial jobs miss the status of being a wage-earner. Therefore most people cannot expect old age to be the happiest time of their life.	

Question	Answer	Marks
5	*Acceptable 'challenge' conclusions:* • most people cannot expect old age to be the happiest time of their life. • most people can expect old age not to be the happiest time of their life. • most people can expect old age to be the unhappiest time of their life.	