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**THINKING SKILLS**

**9694/21**

Paper 2 Critical Thinking

**May/June 2019**

MARK SCHEME

Maximum Mark: 45

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**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 **10** 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.

Question	Answer	Marks
1(a)	<p>This email suggests that FB may have been looking for a chance to prove to the head that he was right [1]. It reveals a possible motive for FB to misrepresent his evidence to the Headteacher [1] and gives support to AL's claim that FB provoked the incident [1]. He may have been trying to force the Head to exert stronger discipline [1] and/or this may have been part of his campaign to act quickly to prevent the Year 9 alleged troublemakers from becoming a problem [1]. The email is probable evidence that FB is biased against a group of Year 9 boys / JR [1]. It is likely that JR is one of the troublesome boys from Year 9 to which Mr Bell referred [1], but it is not certain [1].</p>	<b>2</b>
1(b)	<p>The Headteacher's position gives him a good reputation / VI to maintain his reputation by acting fairly and honestly [1]. The Head was not present at the incident himself and therefore has poor ability to know what really happened / relies on what FB has told him [1] although he has good ability to know what FB has told him [1]. The Head has no VI to misrepresent what FB has told him [1]. As a teacher, FB has a good reputation / vested interest to tell the truth in order to maintain his professional standing [1], but he apparently has a bias/vested interest to exaggerate JR's misbehaviour [1], in order to persuade the Head to punish him severely / to prove that he was right [1]. FB's allegation of swearing is corroborated by Source E [1], but other aspects of his allegations are contradicted by Source E [1]. The document is one-sided (biased) because the Head has not consulted any other person [1].</p> <p><i>Maximum 2 if only one side stated. No mark for judgement.</i></p>	<b>3</b>
1(c)(i)	<p><i>1 mark each for up to 2 of the following answers:</i></p> <p>AL was present at the incident and therefore had very good ability to see what occurred. Her evidence gives an alternative version of events to that given by FB. It confirms the impression of FB gained from Source B. It partially corroborates the allegation made in Source D. It gives a justification for why JR was not working / shows that FB was being unfair. It gives an explanation for why JR behaved as he did / shows that the incident was probably not his fault.</p>	<b>2</b>
1(c)(ii)	<p>AL has a vested interest to understate any misbehaviour which may have occurred in the classroom / to exaggerate FB's behaviour [1] in order to avoid giving the impression that she was not able to cope with the situation [1] / because she is annoyed at FB's interference in a class under her authority [1].</p>	<b>2</b>

Question	Answer		Marks
1(d)	<b>Level 3</b> 5–6 marks	A strong answer, which provides a reasoned argument including thorough evaluation of all or most of the evidence to support an acceptable conclusion in terms of probability and evaluates the plausibility of at least one alternative conclusion.	<b>6</b>
	<b>Level 2</b> 3–4 marks	An answer which evaluates some of the evidence, draws an acceptable conclusion in terms of probability and may mention the plausibility of at least one alternative conclusion.	
	<b>Level 1</b> 1–2 marks	A weak answer, which refers to some of the evidence, possibly including a simple evaluative comment. The conclusion may be unstated or over-stated.	
	<b>Level 0</b> 0 marks	No credit-worthy material.	
	<p><b>Indicative content</b></p> <p>The possible conclusions are:</p> <ul style="list-style-type: none"> <li>JR fully deserved to be suspended from school.</li> <li>JR deserved to be suspended, but his behaviour was not as bad as alleged by FB.</li> <li>JR deserved to be punished, but not by such a serious penalty as suspension.</li> <li>JR did not deserve to be suspended.</li> </ul> <p><b>Notes for the guidance of markers</b></p> <p>Simple supported conclusion 1 (if no/wrong conclusion cap at Level 2)</p> <p>+ simple consideration of alternative +1 AND reasoned rejection of alternative +1</p> <p>+ explicit use of some (3 or fewer) sources of evidence +1 OR explicit use of all or most (4 or more) sources of evidence +2</p> <p>+ critical evaluation of evidence +1 or (more than one case) +2 + good inferential reasoning +1 or (more than one case) +2</p>		

Question	Answer	Marks
2(a)	<p>Not well / it does not support the claim [1]. There is no evidence to show that the dog's ability to know the difference between one ball and another is because one is blue and the other green / there may be other physical differences between the balls [1]. The difference in colour is likely also to represent a difference in tone/shade, which the dog would be able to recognise with black and white vision [1]. The blogger appears to claim that the dog's intelligence is further illustrated by her fetching the correct ball after being told she got it wrong, but since there is only one other ball this does not seem to show anything [1]. There is no evidence that the dog can <i>classify</i> objects by colour [1], which would be the reasonable meaning of 'recognise colours' [1]. By analogy with Source E, it is possible that the dog is picking up cues from the owner's behaviour [1].</p> <p><i>Do not credit any of the following answers, but do accept them as sufficient justification for awarding the judgement mark:</i></p> <p><i>Being able to differentiate between two colours is insufficient evidence to justify the claim that the dog can distinguish colours.</i></p> <p><i>The fact that the dog sometimes brings the wrong ball shows that it cannot really differentiate them accurately by colour.</i></p> <p><i>Because there are only two balls, there is a 50% chance of choosing the right one by chance.</i></p>	3
2(b)(i)	<p>1 mark for either of the following:</p> <p>The owners have good expertise/ability to see the behaviour of their own dogs</p> <p>Most of the estimates (1–6 years) are intuitively plausible.</p>	1
2(b)(ii)	<p>The owners are likely to be biased in favour of their own dogs [1] and therefore likely to over-estimate their abilities [1]. It is likely that respondents held differing interpretations of 'intelligence' [1] and/or different estimates of the intelligence of children [1], and their judgements are inevitably subjective / merely opinions [1].</p>	2
2(c)	<p>This case suggests that apparent intelligence on the part of animals may actually be due to their ability to read cues from humans [1] and that researchers should therefore design their experiments in such a way as to exclude that explanation [1]. Arguably, the ability to draw inferences from very close observation is a form of intelligence [1], but that suggests a form of animal intelligence which is different from that implied by the claims already made [1]. *However, the findings may not be applicable across species [1].</p> <p><i>*Note to markers: do not credit this point on its own.</i></p>	3

Question	Answer		Marks
2(d)	<b>Level 3</b> 5–6 marks	A reasoned argument, which uses and evaluates all or most of the evidence provided.	<b>6</b>
	<b>Level 2</b> 3–4 marks	A simple argument, which uses and/or evaluates evidence.	
	<b>Level 1</b> 1–2 marks	A weak answer, which makes some correct reference to evidence but consists of opinion and/or assertion rather than argument <b>or</b> a weak argument which makes no reference to evidence.	
	<b>Level 0</b> 0 marks	No credit-worthy material.	

Question	Answer	Marks
2(d)	<p><b>Indicative content</b></p> <p>The only source which directly supports this claim is Source A, in which the example of one exceptional dog shows that at least one member of at least one breed of dog can be taught to recognise a larger vocabulary than most people would probably think and to follow a very limited range of instructions.</p> <p>Source B suggests that some owners are mistaken in the intelligence they attribute to their dogs.</p> <p>Source C shows that most dog owners are fairly moderate in their estimates of the intelligence of their dogs, but these estimates may be slightly higher than non-dog-owners would estimate and some dog-owners are unrealistically optimistic in their estimates (or a few dog-owners appreciate the extent of dogs' intelligence).</p> <p>Source D suggests some ways of estimating how intelligent a dog is, which suggests that some dogs are quite intelligent in terms of these tests, but it is not clear what it means to identify dogs as intelligent in these terms and there is no evidence as to whether this level of intelligence is higher 'than most people realise'.</p> <p>Source E suggests that evidence of apparent intelligence may actually be evidence of very close observation, which arguably is a form of intelligence.</p> <p><b>Notes for the guidance of markers</b></p> <p>Simple supported conclusion 1 or nuanced conclusion 2 (if no/wrong conclusion cap at Level 2)</p> <p>+ <u>use</u> of up to 3 sources +1 or <u>use</u> of 4 or 5 sources of evidence +2 <i>not just mentioning or summarising or comprehension</i></p> <p>+ critical evaluation of evidence +1 or (more than one case) +2</p> <p>+ good inferential reasoning +1 or (more than one case) +2 <i>not speculation</i></p> <p>+ personal thinking +1</p>	

Question	Answer	Marks
3(a)	<p><b>2 marks:</b> This policy [of requiring people to pass a test before being allowed to drive] should be changed.</p> <p><b>1 mark:</b> Most countries require people to pass a test before being allowed to drive, but this policy should be changed.</p>	<b>2</b>

Question	Answer	Marks
3(b)	<p>1 mark for each of the following, to a maximum of 3 marks:</p> <p>(So) the existence of the driving test does not guarantee that only safe drivers are allowed to drive. they [driving tests] are not needed now Driving tests infringe against equality of opportunity. (So) passing a driving test is proof of ability to pay, not to drive safely. Driving tests (therefore) assess the wrong skills.</p> <p>Allow <u>one</u> additional element or <u>one</u> significant omission in each case. If more than three answers are offered, mark the first four only.</p>	3
3(c)	<p>Marks for each evaluative point as follows, up to a maximum of 5 marks:</p> <p>2 marks: Valid evaluative point, clearly expressed. 1 mark: Weak attempt at a valid evaluative point (e.g. assumption expressed as counter).</p> <p><i>Paragraph 1</i>  <i>Straw Man:</i> It is unlikely that anyone is suggesting that driving tests guarantee that only safe drivers are allowed to drive.  <i>Non sequitur:</i> The existence of bad drivers would support a conclusion that drivers should be tested more rigorously or more often, rather than that they should not be tested at all.  <i>Inadequate conclusion:</i> The requirement to take a test may have significantly reduced the number of unsafe drivers on the road, even if it has not eliminated them entirely.</p> <p><i>Paragraph 2</i>  <i>Conflation:</i> ‘drivers were not required to pass a test’ is conflated with ‘tests were not considered necessary’, whereas the question had probably not been raised.  <i>Appeal to tradition/history:</i> The fact that driving tests were not needed when there were very few cars on the roads does not show that they are not needed now, when most people drive cars. (Can be expressed as an assumption.)  <i>Inadequate support:</i> Even if it is true that drivers have not ‘become less competent’, other factors may have changed, such as conditions having become more hazardous. (Can be expressed as an assumption.)  <i>Assumption:</i> that drivers were competent before driving tests were introduced.</p> <p><i>Paragraph 3</i>  <i>Assumption:</i> That poor people need/should be able ‘to run a car’.  <i>Assumption:</i> That the responsibility for paying for lessons and the cost of the test should fall to the individual, rather than the state.  <i>Assumption:</i> That (expensive) lessons are needed in order to pass a driving test.  <i>Non sequitur:</i> This would better support a proposal that lessons/tests should be subsidised or free rather than being abolished.</p>	



Question	Answer	Marks								
3(c)	<p><i>Paragraph 4</i></p> <p><i>False dichotomy:</i> Even if successful applicants are expected to show their appreciation to the examiner in a financial manner, they may also have to demonstrate competence in driving. <i>(Can be expressed as confusion of necessary and sufficient conditions or as an assumption.)</i></p> <p><i>Inadequate support:</i> The possibility that people in some countries may be able to pass the test dishonestly does not support the conclusion that other countries should abolish the test. <i>(Can be expressed as an assumption.)</i></p> <p><i>Paragraph 5</i></p> <p><i>Assumption:</i> That it is not important for drivers to be able to drive safely under stressful conditions.</p> <p><i>Assumption:</i> That a generic skill of test-passing applies to driving tests.</p>									
3(d)	<table border="1" data-bbox="304 824 1334 1323"> <tbody> <tr> <td data-bbox="304 824 472 1025"><b>Level 3</b> 4–5 marks</td> <td data-bbox="472 824 1334 1025">Developed, coherent argument. Reasons strongly support conclusion. Development may include intermediate conclusion or apt examples. Simply structured argument – 4 marks. Effective use of IC etc. – 5 marks.</td> </tr> <tr> <td data-bbox="304 1025 472 1126"><b>Level 2</b> 2–3 marks</td> <td data-bbox="472 1025 1334 1126">A simple argument. One reason + conclusion – 2 marks. Two or more separate reasons + conclusion – 3 marks.</td> </tr> <tr> <td data-bbox="304 1126 472 1227"><b>Level 1</b> 1 mark</td> <td data-bbox="472 1126 1334 1227">Some relevant comment.</td> </tr> <tr> <td data-bbox="304 1227 472 1323"><b>Level 0</b> 0 marks</td> <td data-bbox="472 1227 1334 1323">No relevant comment.</td> </tr> </tbody> </table> <p><i>Maximum 3 marks for wrong conclusion or if conclusion is implied but not stated.</i></p> <p><i>No credit for material merely reproduced from the passage.</i></p>	<b>Level 3</b> 4–5 marks	Developed, coherent argument. Reasons strongly support conclusion. Development may include intermediate conclusion or apt examples. Simply structured argument – 4 marks. Effective use of IC etc. – 5 marks.	<b>Level 2</b> 2–3 marks	A simple argument. One reason + conclusion – 2 marks. Two or more separate reasons + conclusion – 3 marks.	<b>Level 1</b> 1 mark	Some relevant comment.	<b>Level 0</b> 0 marks	No relevant comment.	<b>5</b>
<b>Level 3</b> 4–5 marks	Developed, coherent argument. Reasons strongly support conclusion. Development may include intermediate conclusion or apt examples. Simply structured argument – 4 marks. Effective use of IC etc. – 5 marks.									
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<b>Level 1</b> 1 mark	Some relevant comment.									
<b>Level 0</b> 0 marks	No relevant comment.									

Question	Answer	Marks
3(d)	<p><b>Specimen level 3 answers</b></p> <p><i>Support (102 words)</i></p> <p>Lack of exercise lies at the root of much ill health in the world today. It can be difficult to find time to go to the gym in the course of a busy schedule. But most people have to travel to work, to the shops and to social events. So, provided they are not too far away, walking or bicycling should be the favoured mode of transport.</p> <p>Motor vehicles are a major cause of air pollution. They also use up non-renewable natural resources. So reducing the use of cars is an environmentally responsible policy.</p> <p>Therefore we should drive cars only when necessary.</p> <p><i>Challenge (95 words)</i></p> <p>The invention of the internal combustion engine revolutionised life in the developed world. It dramatically extended the horizons of people's professional, commercial and social lives. By enabling people to travel beyond their own neighbourhood, the use of the car has vastly improved their quality of life.</p> <p>In addition to the use of a car for necessary travel, many people enjoy driving as a leisure activity, while motor sports give pleasure to spectators as well as participants. So driving a car is enjoyable as well as useful.</p> <p>Therefore we should not drive cars only when necessary.</p> <p><i>Note to markers:</i>  <i>It is possible to interpret this claim as advocating an intermediate position between driving cars whenever one wants to and completely refraining from driving.</i>  <i>So on this occasion it <u>is</u> legitimate for arguments <u>supporting</u> the claim to argue both for and against driving.</i>  <i>Arguments <u>challenging</u> the claim may conclude with any of the following (or similar):</i></p> <p style="padding-left: 40px;"><i>We should not drive cars only when necessary.</i>  <i>We should drive cars whenever we want to.</i>  <i>We should not drive cars.</i></p>	