



PHILOSOPHY AND ETHICS ATAR course examination 2017 Marking Key

Marking keys are an explicit statement about what the examining panel expect of candidates when they respond to particular examination items. They help ensure a consistent interpretation of the criteria that guide the awarding of marks.

Section One: Critical reasoning 30% (30 Marks)

Question 1 (3 marks)

Smoking tobacco is an unnatural and unhealthy practice because it is not beneficial to mental or physical health and it is not part of the natural way of things for a person to inhale the smoke of burning dried tobacco.

For the above argument:

(a) Circle the word that **best** describes the strength of the inference.

(1 mark)

Description	Marks
The word 'Strong' is circled. Nothing else is circled.	1
Total	1

(b) Evaluate the cogency of the argument. Circle the correct answer.

(1 mark)

Description	Marks
The words 'Not Cogent' are circled. Nothing else is circled.	1
Total	1

(c) Give **one** reason that justifies your evaluation of the cogency.

Description		Marks
The argument is not cogent because it begs the question/is circular/assumes the truth of the conclusion in the premises. or At least one of the premises is not acceptable.		1
	Total	1

Question 2 (3 marks)

(a) If you don't do well in your examinations, you can't go to Rottnest.

Underline the sentence that means the same as the above sentence.

- (i) You cannot go to Rottnest unless you do well in your examinations.
- (ii) If you do well in your examinations, then you can go to Rottnest.

Description		Marks
Sentence (i) is underlined as shown above.		
or		1
Sentence (i) is marked in a way that indicates the correct answer.		
	Total	1

(b) Express the following sentence as a conditional (If X, then Y) statement. (1 mark)

You are either with me or you are against me.

Description	Marks
If you are not with me, then you are against me or	
If you are not against me, then you are with me or	4
If you are with me, then you are not against me or	ı
If you are against me, then you are not with me.	
Total	1

(c) Is the following statement analytic or synthetic?

(1 mark)

(1 mark)

If all cats have tails and Snuggles is a cat, then Snuggles has a tail.

Description	Marks
The statement is analytic.	1
Total	1

Question 3 (2 marks)

(1) {In formal logic, reasoning that satisfies **both** the following requirements: truth of premises and deductive validity, is called 'sound'.} Because of this, (2) {sound reasoning succeeds in justifying or explaining its conclusion}; (3) {unsound reasoning fails to do so.}

OR

(1) {In formal logic, reasoning that satisfies **both** the following requirements: truth of premises and deductive validity, is called 'sound'.} Because of this, (2) {sound reasoning succeeds in justifying or explaining its conclusion; unsound reasoning fails to do so.}

For the above argument:

(a) Bracket and number the separable statements.

Description	Marks
Brackets and numbers are placed in the exact locations as shown above in either diagram.	1
Total	1

Question 3 (continued)

(b) Using the numbers you have given each proposition, draw a diagram of the argument.

(1 mark)

Description	Marks
If the candidate bracketed and numbered the statements correctly in (a)	
then a diagram exactly like this one must be produced:	
(1)	
(2) (3)	
or	1
If the candidate bracketed and numbered the statements incorrectly in (a) so that the first sentence was (1) and the whole of the second sentence was (2) then a diagram exactly like this one must be produced: (1)	
(2)	<u> </u>
Total	1

Note: The conventions that need to be formally observed and applied correctly are:

- the arrow to represent a relationship of inference
- the placement of the arrow exactly between the premise (or linked premises) and the conclusion that are in the inferential relationship.

Question 4 (2 marks)

The object of reasoning is to find out, from the consideration of what we already know, something we do not know. Reasoning is good, consequently if it leads to a true conclusion from true premises and not otherwise.

For the above argument:

(a) Circle the inference indicator.

(1 mark)

Description	Marks
The inference indicator 'consequently' is circled. Nothing other than the word 'consequently' is circled.	1
Total	1

(b) Underline the conclusion.

Description	Marks
The conclusion is underlined exactly as shown. The word 'consequently' is not underlined and both parts of the conclusion are underlined.	1
Total	1

Question 5 (2 marks)

Since we implemented the new training program for psychiatric emergency teams, reports of emergency psychiatric patients being harmed have decreased. The training program is clearly successful in preventing harm to patients in emergency situations.

For the above argument:

(a) Underline the conclusion.

(1 mark)

Description	Marks
The conclusion is underlined as shown.	1
Total	1

(b) Name the fallacy.

(1 mark)

Description	Marks
Post hoc ergo propter hoc or post hoc fallacy or post hoc.	1
Total	1

Question 6 (4 marks)

(a) Name the fallacy committed in the following argument.

(1 mark)

We have to legalise gay marriage. We either legalise it or we subject a significant percentage of the population to a life of misery and we can't subject people to a life of misery.

Description		Marks
False dichotomy or fallacy of false alternatives.		1
	Total	1

(b) Name the fallacy committed in the following argument.

(1 mark)

The higher the rate of consumption of chocolate per capita that a country has, the more Nobel Prize winners it has. It might seem unexpected that eating chocolate makes you smarter, but chocolate contains powerful antioxidants called flavanols that are known to improve cognitive ability, and improved cognitive ability surely plays a large role in winning Nobel Prizes.

Description	Marks
Confusion of correlation and causation or non sequitur.	1
Total	1

Question 6 (continued)

(c) Name the fallacy committed in the following argument.

(1 mark)

If we don't legislate to ban people from wearing religious garments and symbols like crucifixes and headscarves we will very quickly find ourselves overrun by religion, with a mosque in every suburb and a priest around every corner.

Description		Marks
Slippery slope or scare tactics or appeal to adverse consequences or fallacy of slippery precedent.		1
	Total	1

(d) Name the fallacy committed in the following argument.

(1 mark)

Cutting the company tax rate must be ok because, even though it will reduce the government revenue in the short term, most people approve of it.

Description	Marks
Ad populum or fallacious appeal to popularity.	1
Total	1

Question 7 (4 marks)

Scientific realists think that we have good reasons to believe that our presently successful scientific theories are true. But most of those that were successful in the past turned out to be false, so we have no good reason to believe that our currently successful scientific theories are true. So, they are just being over-optimistic.

For the above argument:

Write in full and number the separable statements in their order of occurrence.

Description	Marks
(1) Scientific realists think that we have good reasons to believe that our	1
presently successful scientific theories are true.	•
(2) Most of [our scientific theories] that were successful in the past turned out to	1
be false.	ı
(3) We have no good reason to believe that our currently successful scientific	1
theories are true.	ļ
(4) [Scientific realists] are just being over-optimistic.	1
Total	4
Note: The square brackets are not required but the phrases inside them are.	

Question 8 (6 marks)

OPTION 1: (1) {No-one should be entitled to inherit any property whatsoever from their relatives or from anyone else}. The main reason for this is that (2) {inheriting property reinforces existing inequalities unfairly.} Firstly, (3) {allowing inheritance impoverishes those who by no fault of their own have poor relatives.} And, secondly, (4) {those with wealthy relatives get richer through no efforts of their own.} A further reason why no-one should be entitled to inherit any property is that (5) {inheriting property causes conflict among those lucky enough to share an inheritance.}

OPTION 2: (1) {No-one should be entitled to inherit any property whatsoever from their relatives or from anyone else}. The main reason for this is that (2) {inheriting property reinforces existing inequalities unfairly.} Firstly, (3) {allowing inheritance impoverishes those who by no fault of their own have poor relatives.} And, secondly, (4) {those with wealthy relatives get richer through no efforts of their own.} A further reason why (1)/(5) {no-one should be entitled to inherit any property} is that (6) {inheriting property causes conflict among those lucky enough to share an inheritance.}

For the above argument:

(a) Circle **three** inference indicators.

(1 mark)

Description	Marks
The candidate circles three out of the following four options:	
1. 'The main reason' or 'The main reason' plus any part of the following phrase up to the whole of 'The main reason for this is that'.	
2. The word 'Firstly'.	1
3. The word 'Secondly'.	
4. Either 'A further reason' or 'A further reason why no one should be	
entitled to inherit any property'.	
Total	1

(b) Bracket and number the separable statements.

Description	Marks
Brackets and numbers are placed in the exact locations as shown above. There are two possible correct options given above.	1
Total	1

Question 8 (continued)

(c) Using the numbers you have given each proposition, draw a diagram of the argument.

(4 marks)

Description	Marks
Diagram showing premise (3) and premise (4) giving convergent support	1
to sub-conclusion (2).	·
Diagram showing sub-conclusion (2) providing support to the conclusion.	1
Diagram showing (5) [Option 1] or (6) [Option 2] providing independent	1
support to the conclusion.	-
Diagram showing the conclusion as (1) [Option 1] or (1)/(5) [Option 2].	1
OPTION 1 (from bracketing/numbering in (b) above)	
(3)	
(2) (5)	
(1)	
OPTION 2 (from bracketing/numbering in (b) above)	
(3) (4)	
(2) (6)	
40.445	
(1)/(5)	
Candidates may use a different numbering system. They should receive	
the marks if their diagram is relevantly similar to the one above.	
Total	4

Note: The conventions that need to be formally observed and applied correctly are:

- the arrow to represent a relationship of inference
- the placement of the arrow exactly between the premise (or linked premises) and the conclusion that are in the inferential relationship.

Question 9 (4 marks)

(1) {If we don't increase interest rates then housing prices will keep increasing.} (2) {If they keep increasing it will be almost impossible for first-home buyers to afford a home} and (3) {if that's almost impossible, the economy will stagnate and the rental market will be under too much pressure.} So, (4) {if we don't increase interest rates the economy will stagnate and the rental market will be under too much pressure.}

For the above argument:

(a) Bracket and number the separable statements.

(1 mark)

Description	Marks
Brackets and numbers are placed in the exact locations as shown above.	1
Total	1

(b) Using the numbers you have given each proposition, draw a diagram of the argument. (2 marks)

Description		Marks
Diagram showing premises (1), (2) and (3) linked to support the conclusion.		1
Diagram showing (4) as the conclusion.		1
(1) + (2) + (3)		
\downarrow		
(4)		
To	otal	2

Note: The conventions that need to be formally observed and applied correctly are:

- the arrow to represent a relationship of inference
- the placement of the arrow exactly between the premise (or linked premises) and the conclusion that are in the inferential relationship.
- (c) Circle the word that **best** describes the strength of the inference. (1 mark)

Description	Marks
The word 'Strong' is circled. Nothing else is circled.	1
Total	1

40% (40 Marks)

Question 10 (20 marks)

10

The following dialogue is an excerpt from a community of inquiry.

You are required to:

summarise the contributions of each participant

(2 marks) (6 marks)

clarify these contributions

evaluate them critically.

(12 marks)

Description	Marks
Criterion 1: Summary (2 marks)	
Identifies the main position of the first participant	1
Identifies the main position of the second participant	1
Total	2
Criterion 2: Clarification (6 marks)	
Concepts	
States clearly and engages critically with philosophical concepts in the dialogue	2
Refers to some philosophical concepts in the dialogue	1
Total	0–2
Arguments	
For each participant:	
Explains the arguments (e.g. by using relevant examples)	2
Describes the arguments	1
Total	0–4
Criterion 3: Evaluation (12 marks)	
Examples	
Explains and engages critically with examples/counter examples in the dialogue	2
Refers to examples/counter examples in the dialogue	1
Total	0–2
Premises	
For each participant:	
Provides relevant reasons to justify their stated acceptability of the premises	2
States the acceptability of the premises	1
Total	0–4
Inferences	
For each participant:	
Provides relevant reasons to justify their stated strength of the inferential moves	2
States the strength of the inferential moves	1
Total	0–4
Cogency	-
Provides a detailed and accurate assessment of the cogency of the arguments	2
pointing out any fallacies	
Makes assertions about cogency	1
Total	0–2
Overall total	20

concerns.

Markers' notes: The following notes are not exhaustive or prescriptive and are to be used as a guide to judgement according to the marking key. Candidates are not required to make all of the following points to achieve full marks.

Analysis and evaluation

Don attempts to defend the position that protecting the environment is bad for business. Bernie attempts to defend the position that we should protect the environment for people now and for future generations.

The dialogue focuses on issues of social responsibility and the ethical obligations that we may have to humans and the human world (people now, business and jobs), to future generations (possible people) and to the non-human world (protecting the environment). The dialogue raises issues about the measures we adopt to mitigate climate change and to ensure environmentally sustainable development and resource use. This notion often implicitly refers to the obligation of the present generation to behave in a way that ensures that future generations' access to health and well-being is not compromised. Don seems exclusively focused on the issue of financial/economic impacts, whereas Bernie attempts to show that environmental considerations cannot be excluded from economic

Don's argument lacks cogency on several fronts. By referring to his environmentalist opponents from the outset as 'lentil eating hippies', etc. he commits an ad hominem fallacy against any argument that they might assert. In Don's second paragraph, the fact he says he's worried about actual people now shows that he is not responding to the part of Bernie's previous claim that actual people now will be impacted by global warming. His argument about future people is more compelling, although it is challenged by Bernie's next counterargument. Don's final response exemplifies both the strawman fallacy and begging the question. It strawmans Bernie's argument by falsely presenting him as having made the preposterous claim that 'dealing with global warming is as easy as pressing a button'. Don didn't understand that Bernie was providing a counter-example to his (Don's) previous argument about future people and possibilities. Bernie had constructed a hypothetical scenario that attempted to show that one would still be morally wrong to inflict suffering on a future generation (such as by global warming) even if it is granted that the people don't vet exist. In his final claim Don begs the question against Bernie by re-asserting with no argument the very claim that Bernie had sought to argue against - that protecting the environment is bad for business.

Bernie begins his contribution with an appeal to authority. This appeal is not necessarily a fallacious one; however, as scientists (and I think here he uses the word as short hand for climate scientists of various kinds) are the appropriate authority to appeal to on the issue of global warming. Whether they have proved 'beyond all reasonable doubt' is another question and probably needs support to show why it shouldn't be considered reasonable to harbour some scepticism about global warming. Bernie then uses scare tactics by claiming that unless we do something now, all jobs and the entire economy will be destroyed. While the claim, if acceptable, would provide strong support to his sub-conclusion that not taking serious measures to protect the environment will be bad for people now and in the future, the claim as it stands is unsupportable. He would have been better to say that unless we take serious action there will be very dire consequences for the environment and this will affect the economy, which in turn will impact on people's jobs. In what way it will impact the economy and jobs is hard to predict. Had he made a claim such as this, his first contribution would have been cogent, having an acceptable premise and providing strong support for his conclusion.

In his second contribution, Bernie attempts to counter Don's rhetorical question which amounts to a claim that we shouldn't worry about future generations, because they are only possible and uncertain. Bernie provides a thought experiment that is intended to motivate the moral intuition that we have a strong moral obligation to ensure that the future is one in which there is more pleasure/happiness than pain/suffering. While Bernie's thought experiment does seem to support the claim that in such a scenario we should press button B, it is arguable what we can conclude from that about climate change and environmental policy.

Question 10 (continued)

That said, it may be that Bernie's argument was not intended to support any direct implications about climate policy. It might best be interpreted simply as a counter-argument to the moral permissibility of creating a situation whereupon future people are harmed or benefitted, even though they don't yet exist. Candidates could argue for or against Bernie's conclusion in a number of ways. One way to argue against it would be to discuss what is known as 'the slogan', or the 'person-affecting restriction' in ethics. The slogan states that 'one situation cannot be worse (or better) than another if there is no one for whom it is worse (or better)'. Candidates should be careful here of begging the guestion, as Bernie's counterargument is supposed to be against the content of such a slogan. Their argument would need to provide further reasons for holding the position encapsulated by the slogan, rather than the position Bernie defends. Bernie is asking us to adjudicate on the question whether one situation is better than another without there being any actual person for whom we are to make this judgment. That said, these issues are complex and debatable. Candidates should make an assessment of the cogency of Bernie's second contribution based on the claims they make about the acceptability of the thought-experiment, how it provided support for the claim that we would have an obligation to press Button B, and how that claim provides support for the implied conclusion that we have a moral obligation to take serious measures to protect the environment for the sake of future generations.

Question 11 (20 marks)

Choose **one** of the following texts and:

summarise the text (2 marks)

• clarify its meaning (8 marks)

evaluate it critically. (10 marks)

Description	Marks
Criterion 1: Summary (2 marks)	
Identifies the topic	1
Identifies the main conclusions	1
Total	2
Criterion 2: Clarification (8 marks)	
Concepts	
Explains and critically engages with core concepts	3
Describes core concepts	2
States core concepts	1
Total	0–3
Arguments	
Identifies the arguments in the texts and clarifies the premises and inferences	5
Identifies the arguments in the texts and clarifies some of the premises and	4
inferences	'
Identifies the arguments in the texts and refers to some of the premises and	3
inferences	
Identifies the arguments in the texts	2
Identifies an argument or some arguments in the texts	1
Total	0–5
Criterion 3: Evaluation (10 marks)	
Premises	
Identifies the major premises and accurately critically evaluates their	4
acceptability, giving relevant reasons	4
Identifies the major premises and evaluates their acceptability	3
Identifies the major premises and states their acceptability	2
Identifies some of the major premises	1
Total	0–4
Inferences	
Identifies the inferential moves and accurately critically evaluates inferential	4
strength, giving relevant reasons	4
Identifies the inferential moves and evaluates inferential strength	3
Identifies some inferential moves and makes some assertions about inferential	·
strength	2
Identifies some inferential moves	1
Total	0–4
Cogency	
Assesses the cogency of the argument based on their evaluation of premise	0
acceptability and inferential strength	2
Makes assertions about cogency	1
Total	0–2
Overall total	20

Question 11 (continued)

Markers' notes: The following notes are not exhaustive or prescriptive and are to be used as a guide to judgement according to the marking key. Candidates are not required to identify all of the premises listed in order to achieve full marks.

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Summary:

Text one is about the nature of moral action. In the passage the speaker attempts to show that right conduct is more than merely telling the truth and repaying our debts by use of a counter example.

Clarification:

The overall argument takes the initial claim, that 'doing right consists in nothing more than truth telling and repaying our debts' and asks whether it could be true. The argument then provides a counter-example to the second part of the claim, showing that there are at least some occasions where giving back what we have received would be the wrong thing to do. It then provided a counter-example to the first part of the claim by asserting that it would not be right to unreservedly tell the truth to a mad person. These two counter-examples are used to show that the original claim could not be generally true, and this in turn provides support for the main conclusion that right conduct cannot be defined in the way that was suggested by the first claim.

The argument might be formalised as follows:

- (P1) Doing right is nothing more or less that telling the truth and returning what we have received.
- (P2) We can conceive of a situation where returning what we have received is not doing right.
- (P3) We can conceive of a situation where telling the truth is not doing right.

So.

(C1) (P1) must be false

So.

(C2) Right conduct cannot be defined as telling the truth and restoring what we have received.

Evaluation:

Evaluation of the argument should focus on:

- (1) the support the premises give to the conclusion and the sub-conclusion, and
- (2) the acceptability of the premises.

The premises, if acceptable, would give strong support to the conclusion, and to the sub-conclusions.

The cogency of the argument will depend on the evaluation of the acceptability of the premises.

Summary:

Text two is an argument to the conclusion that not every human being is a person and not every person is a human being. The topic is the difference between the ethical notion of personhood and the biological category of human being.

Clarification:

A formalisation of the argument might look something like this.

(P1) Human being is a biological concept, person an ethical concept.

So,

- (C1) Deciding what is a human being is a simple biological matter.
- (P2) To be a person you have to meet certain criteria such as autonomy, etc.

So.

- (C2) Deciding what is a person is a complex moral issue.
- (P3) There are things that are human but we don't judge them to be persons (foetuses, clinically dead/brain dead).
- (P4) There are things that are persons that are not human (pets, AI, higher primates). So.
- (C) Not every human being is a person, and not every person is a human being.

Evaluation:

As it stands, the argument appears cogent. The premises are prima facie acceptable and give strong support to the conclusion; however, candidates who chose this text should focus on a more nuanced examination of the acceptability of the premises, and their support for the sub-conclusions. For instance, the first sub-argument moves from a claim about 'human' being a biological concept to it being a simple matter. It is quite possible that the premise is true and the conclusion is false. Deciding what is a human being biologically might be a complex matter for several reasons, for instance biological categories are not as fixed and certain as it might appear, deciding when some evolutionary changes should be considered a defect or when they should be seen as the development of a new adaptation that renders their possessor a different subspecies is a complex question. Perhaps the sub-conclusion would be better supported if it said that, 'for the most part, deciding what is a human being is a simple matter'.

Candidates could also criticise the argument for a lack of clarity in the move from P2 to C2 in that it is not clear where the moral complexity being claimed lies. Is the complexity derived from deciding what the criteria for personhood is, or is it in applying the criteria to specific cases? If it is the former and not the latter, it is not clear that the difference between biological determinations of humanness and moral determinations of personhood are significantly different. Drawing biological boundaries is complex, as is drawing moral boundaries; however once you have done so, working out what is inside them might be simple.

Finally, candidates might want to interrogate P3 and P4. Many people share the intuitions that are expressed by those claims, but not all, and often on the grounds that there is something morally exceptional about human beings. If the candidate can give good reasons why we might not accept P3 and P4, this would lessen the cogency of the argument. If acceptable, P3 and P4 give strong support to the conclusion, but the overall evaluation of cogency will depend on this assessment of acceptability.

Summary:

Text three is an argument about the epistemological foundation of inductive reasoning. It is based on Hume's sceptical argument about induction and the main conclusion is that all inductive arguments are, at base, viciously circular.

Clarification:

Candidates should begin by explaining what inductive reasoning is, and possibly how it differs from other kinds of reasoning such as deductive reasoning.

The argument might be formalised as follows:

- (P1) All knowledge about things we cannot observe (i.e. predictions about the future) come from experience, through induction.
- (P2) All inductive inferences depend on the implicit premise that 'the future will resemble the past'.
- (P3) The implicit premise that 'the future will resemble the past' depends on our experience that our past futures have resembled our past pasts.
- (C1) P3 uses our past experience to support an induction about what the future will be like. So.
- (C2) The premise that supports our belief in induction is itself an induction. So
- (C) Induction is based upon viciously circular reasoning.

Evaluation:

The argument as it stands appears cogent. The premises seem acceptable and if they are, they give strong support to the conclusion. Candidates should point out that scepticism about induction is hard to resist, but there are some plausible responses. In this context, the bulk of the evaluation will focus on the acceptability of P1, and P2 and the question whether the circularity is in fact vicious as claimed in the conclusion.

Section Three: Construction of argument

30% (30 Marks)

Use the marking key below for Questions 12–16.

Argue for or against the statement with clear definitions, examples and reasons.

Marks will be awarded for demonstration of:

philosophical understandings

(10 marks)

• philosophical argument

(15 marks)

clarity and structure.

(5 marks)

Description	Marks
Criterion 1: Philosophical understandings	
Demonstrates a critical understanding of philosophical topics relevant to the question and uses sophisticated philosophical language and concepts	9–10
Demonstrates understanding of philosophical topics relevant to the question and uses appropriate language and concepts	7–8
Demonstrates an understanding of philosophical topics relevant to the question and uses some appropriate philosophical language and concepts	5–6
Demonstrates some understanding of philosophical topics relevant to the question	3–4
Demonstrates a limited understanding of philosophical topics relevant to the question	1–2
Fails to demonstrate an understanding of philosophical topics relevant to the question	0
Total	10
Criterion 2: Philosophical argument	
Constructs a relevant, cogent argument, which demonstrates originality, and a deep understanding of philosophical method (e.g. relies on plausible assumptions, demonstrates logical insight, effectively uses examples and counter-examples where appropriate)	14–15
Constructs a relevant, cogent argument, which demonstrates a sound understanding of philosophical method	12–13
Constructs a relevant, moderately cogent argument, which demonstrates some understanding of philosophical method	10–11
Constructs a relevant, moderately cogent argument (e.g. may contain some errors in reasoning or fails to consider possible objections where appropriate)	8–9
Constructs a relevant, weak argument (e.g. may make controversial assumptions, beg the question and/or commit some other serious errors of reasoning such as informal or formal fallacies)	6–7
Constructs a weak argument that makes few relevant claims (e.g. commits several serious errors of reasoning, has tenuous/occasional links with the question)	4–5
Makes some claims relevant to the question but fails to construct any argument (e.g. merely makes assertions, merely discusses the thoughts of others)	2–3
No relevant argument (e.g. fails to address the question)	0–1
Total	15
Criterion 3: Clarity and structure	
Writes with structure and clarity (e.g. clarifies key terms, sign-post key steps of the argument, logical ordering of topics)	4–5
Writes with some structure and some clarity	2–3
Writing is poorly structured and lacks clarity (e.g. fails to clarify key terms, unclear argument structure)	0–1
Total	5
Overall total	30

ACKNOWLEDGEMENTS

Question 4 Excerpt adapted from: Peirce, C. S. (1877). Illustration of the logic of

science: Fixation of belief. Popular Science Monthly, 12. Retrieved

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licence.

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Question 7 Concept from: Laudan, L. (1981). A confutation of convergent realism.

Philosophy of science, 48(1), pp.19–49. Retrieved October, 2017, from www.observatorioseguranca.org/documentos/METODOLOGIA%202011/Aula%204%202011/A%20CONFUTATION%20OF%20CONVERGENT%

20REALISM%20laudan_PS1981.pdf

Question 10 Quote from: Temkin, L.S. (1993). Interpreting the slogan. In *Inequality*,

(p.257). New York, NY: Oxford University Press.

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