
Question 1:

Answer each of these and explain your answers:

(10 Points)

Can an invalid argument be sound?

If an argument is unsound, does that mean it must be invalid?

An invalid argument cannot be sound since one part of the definition of soundness is that the argument must be valid. However, an unsound argument does not automatically make the argument invalid. If the premises are false, that would make the argument unsound, but the validity could still be intact. If there is a theoretical way for the argument to be true, were the premises true, then the argument remains valid.

Total 71 words.

Grade: 10 / 10

Comments:

Question 2:

Is being a mammal necessary for being a cat? Is it sufficient?

(10 Points)

Answer these two questions, and then explain necessity and sufficiency using this cat/mammal example.

Being a mammal is necessary for being a cat, but it is not sufficient.

Necessity implies that since an animal is a cat, it is a mammal, because all cats are mammals. A cat can not be anything but a mammal, so it is necessary that if it's a cat, its also a mammal. Sufficient would imply that since the animal is a mammal, it is a cat. That of course is untrue since knowing an animal is a mammal is not enough to know it is a cat, as it could be one of countless types of mammals.

Total 99 words.

Grade: 10 / 10

Comments:

Question 3: Explain the difference between an assertion and an argument, and provide an example of each. Which of these is more likely to be convincing, and why?

(10 Points)

An assertion is to state something as if it were true. We may not know whether or not is true, but the speaker is assuming or implying that it is true.

ex: The President of France is good at his job.

An argument is a collection of statements or premises that combined form support for a conclusion. It is a way to prove your point or convince someone of something.

ex: The President of France has lowered taxes, while managing to keep the budget balanced and he is good at dealing with the media. Therefore the President is good at his job.

Total 102 words.

Grade: 7 / 10

Comments: Great answer! However, the second part of this question asked you "which of these is more likely to be convincing, and why?" You did not explicitly answer this and this is where you lost marks.

Question 4: Evaluate this argument. In order to do so, identify the fallacy in the passage, and explain why the argument succeeds or fails.

(10 Points)

Evolutionary biology shows that long ago women were gatherers and men were hunters. The women would stay behind, gather food, and tend to the households and children. While men would travel outside of the village and go hunting for animals before returning home. This shows us that it is natural for women to stay at home, tend to the household and raise children, while men ought to go out into the world in order to make a living and bring food home for his family.

There is an is-ought fallacy here, also known as the Naturalistic Fallacy. The argument fails because here they are using descriptive facts about how early humans acted as an argument for a current moral opinion. They are trying to prove a normative claim with descriptive arguments, which is the basis of the fallacy. There are many other arguments which apply to the normative claim, which would falsify it upon closer analysis.

Total 71 words.

Grade: 10 / 10

Comments:

Question 5: Explain what a weasel word is and give an example of a sentence that uses such a word. Why would someone use a weasel word intentionally in an argument?

(10 Points)

A weasel word is a word that is inserted into a claim to qualify or quantify it in an imprecise way.

ex: This building is pretty small.

Someone might intentionally use a weasel word either to mislead another person or help them defend an assertion they know to be false, or at least imprecise. It would help them prove their argument true even though it may be interpreted otherwise by other people. The above example could be spoken by someone talking about a 15 story building, which objectively is not small. However the speaker could then argue that compared to 50 story buildings it is small. It adds a layer of vagueness which is easy to defend.

Total 117 words.

Grade: 10 / 10

Comments:

Question 6: Give an example of an abductive inference for some claim (this should be significantly different from any examples used in class). What further information might strengthen the argument? What further information might undermine it?

(10 Points)

Someone has a headache, is sweating, has muscle soreness, is dehydrated and tired.

Abductive inference: this person has a fever.

Strengthen the argument: the person has a temperature of 39 degrees.

Weaken the argument: This person just finished running a marathon.

Total 41 words.

Grade: 10 / 10

Comments:

Question 7: What is the difference between a valid deductive argument and an ampliative argument?

(10 Points)

A valid deductive argument is when the conclusion is already contained in the arguments in some form and we are simply extrapolating the conclusion from the arguments. (Ex. $A = B$, $B = C$, therefore $A = C$. All the information is already in the arguments).

An ampliative argument is similar, except that the conclusion isn't actually included in the argument. Rather, it's an assumption of a likely conclusion based on a logical set of arguments.

Total 76 words.

Grade: 7.5 / 10

Comments: Please revisit the textbook material concerning ampliative arguments.

Question 8: What is the difference between vagueness and ambiguity?

(10 Points)

Vagueness is when an assertion is hard to clearly prove true or false. The wording of the assertion affects it such that there could be varying degrees of trueness or falsehood.

On the other hand, ambiguity is when an assertion is unclear due to wording, such as misunderstandings to do homonyms or synonyms, or bad phrase structure which leaves the statement unclear. An ambiguous statement could have multiple interpretations.

Total 69 words.

Grade: 7 / 10

Comments: Please revisit the textbook material concerning vagueness, it is not just simply a tool to be used in an argument.

Question 9: What are two basic differences between a disjunctive statement and a conjunctive statement?

(10 Points)

1) A disjunctive statement usually uses a word like "or". A conjunctive statement is usually constructed using words like "and", "also".

2) A disjunctive statement is true when at least one of the statements within it is true. A conjunctive statement is only true when both substatements are also true.

Total 50 words.

Grade: 7.5 / 10

Comments:

Question 10: A 'Hypothetical Syllogism' is a valid argument and it is structured like this:

(10 Points)

**If P then Q.
If Q then R.
Therefore, If P then R.**

Provide an example (different from those given in the textbook and the course material) of a hypothetical syllogism that has a true conclusion.

If my books are thick then my book-bag will be heavy.
If my book-bag is heavy then my back will be sore.

Therefore, if my books are thick then my back will be sore.

Total 34 words.

Grade: 10 / 10