

PHI 120 Summer 2009 Mid-Term**Multiple Choice**

Identify the choice that best completes the statement or answers the question.

INSTRUCTIONS: The following selections relate to distinguishing arguments from nonarguments and identifying conclusions. Select the best answer for each.

- _____ 1. Authoritarian states are characterized by strong central governments that fairly stringently limit the range of political activity. More often than not, they are one-party states, which means that only one party, that which supports the government, is allowed to engage in political activity. Free discussion and association are strictly curtailed in these systems. Anyone who might dare to criticize the government or to express ideas that are not in conformity with its policies can be severely punished, even by death.
- Robert A. Heineman, *Political Science*
- Argument; conclusion: More often than not ... engage in political activity.
 - Nonargument.
 - Argument; conclusion: Authoritarian states ... limit the range of political activity.
 - Argument; conclusion: Anyone who might dare to criticize ... even by death.
 - Argument; conclusion: Free discussion and association ... in these systems.
- _____ 2. Prior to their extinction, Neanderthals had been widespread in Europe for 100,000 years. Then 50,000 years ago, modern humans moved into Europe from Africa. Twenty-six thousand years after that the last Neanderthal died. At one time it was thought that the Neanderthals were killed by climate change, but this theory has now been discounted. So why did the Neanderthals perish? Probably they were killed by the humans.
- Argument; conclusion: Then 50,000 years ago ... Europe from Africa.
 - Argument; conclusion: At one time it was thought ... now been discounted.
 - Argument; conclusion: Prior to their extinction ... 100,000 years.
 - Nonargument. Twenty-six thousand years after that the last Neanderthal died.
 - Argument; conclusion: Probably they were killed by the humans.
- _____ 3. Scientists have recently shown that heaps of intact DNA from the extinct woolly mammoth are retrievable from the animals' fur. A great deal of that fur is readily available in natural history museums. Such amounts of DNA make it possible to piece together the entire mammoth genome. Hence, we can expect to see mammoth clones in the not too distant future.
- Argument; conclusion: A great deal of that fur ... natural history museums.
 - Nonargument.
 - Argument; conclusion: Scientists have recently shown ... animals' fur.
 - Argument; conclusion: We can expect to see ... in the not too distant future.
 - Argument; conclusion: Such amounts of DNA ... the entire mammoth genome.
- _____ 4. The loss of arctic ice is accelerating as a result of a form of positive feedback. As arctic ice melts, the arctic icecap reflects fewer rays from the sun. When this happens, more rays are absorbed by the surrounding ocean, which increases its temperature. As the temperature of the ocean rises, more arctic ice melts.
- Argument; conclusion: When this happens ... which increases its temperature.
 - Argument; conclusion: As the temperature of the ocean rises, more arctic ice melts.
 - Argument; conclusion: The loss of arctic ice ... positive feedback.
 - Nonargument.
 - Argument; conclusion: As arctic ice melts ... fewer rays from the sun.

INSTRUCTIONS: The following problems relate to identifying and evaluating inductive and deductive arguments. Select the best answer for each.

- _____ 5. After examining DNA evidence found at the crime scene, Dr. Jacobs, a highly qualified forensic biologist, says that Hendrix could not have committed the crime. Therefore, we conclude that Hendrix is innocent.
- Inductive, weak.
 - Deductive, sound.
 - Deductive, invalid.
 - Deductive, valid.
 - Inductive, strong.
- _____ 6. If football is a rough sport, then football injuries abound. It is the case that football injuries abound. Thus, it follows that football is a rough sport.
- Inductive, strong.
 - Deductive, invalid.
 - Inductive, weak.
 - Deductive, valid.
 - Inductive, uncogent.
- _____ 7. The arctic ice cap has been shrinking for several years as a result of global warming, and that trend is expected to continue. Therefore, since arctic polar bears depend on that ice for survival, the arctic polar bear population will shrink in the years ahead.
- Inductive, weak.
 - Deductive, invalid.
 - Inductive, strong.
 - Deductive, valid.
 - Inductive, uncogent.

INSTRUCTIONS: Select the answer that best characterizes the following arguments.

- _____ 8. Frank Larsen argues for stricter gun control. It appears that Frank wants to abolish access to guns altogether. But if law-abiding citizens can't own a gun, then they will have no means of defending themselves against criminals. Obviously Frank's argument is no good.
- False cause.
 - Argument against the person, abusive.
 - Straw man.
 - No fallacy.
 - Red herring.
- _____ 9. Whatever you do, never buy a lottery ticket. If you do, soon you'll be betting on horses. Next it will be slot machines in Las Vegas, and then black jack and high stakes poker. In the end you'll be totally broke.
- Slippery slope.
 - No fallacy.
 - Complex question.
 - False cause.
 - Missing the point.

- _____ 10. After eating a Big Mac for breakfast, poor Steve had a heart attack and died. The message is clear: Never eat a Big Mac for breakfast.
- False cause.
 - Weak analogy.
 - No fallacy.
 - Appeal to unqualified authority.
 - Hasty generalization.
- _____ 11. An instant has no duration. But an hour is composed of instants. Therefore, an hour has no duration.
- Division.
 - Amphiboly.
 - Composition.
 - Red herring.
 - No fallacy.
- _____ 12. Performance enhancing drugs are banned from professional sports. But Viagra is a performance enhancing drug. Therefore, Viagra is banned from professional sports.
- Composition.
 - No fallacy.
 - Appeal to unqualified authority.
 - Amphiboly.
 - Equivocation.
- _____ 13. Mrs. Gladstone's arguments against cuts in Social Security are worthless. As a recipient of Social Security benefits, she would naturally be expected to argue exactly the way she does.
- Argument against the person, circumstantial.
 - False dichotomy.
 - Straw man.
 - Argument against the person, abusive.
 - No fallacy.
- _____ 14. Some tunes are oldies and some oldies are classics. Therefore, some tunes are classics.
- This argument contains a fallacy of weak induction.
 - This argument contains no fallacy.
 - This argument contains a formal fallacy.
 - This argument contains a fallacy of ambiguity.
 - This argument contains a fallacy of relevance.
- _____ 15. It's good to exercise 30 minutes per day because it rejuvenates your body. And we know it rejuvenates your body because people who exercise live longer than those who don't. And we know they live longer because people who exercise feel better. And this is true because its good to exercise 30 minutes per day.
- Begging the question.
 - Composition.
 - No fallacy.
 - Appeal to pity.
 - Slippery slope.
- _____ 16. Stem cell research is immoral because anything that involves killing innocent human beings is immoral.
- Appeal to ignorance.
 - Begging the question.
 - Red herring.
 - Appeal to the people.
 - No fallacy.

- ___ 17. Carol's arguments against abortion aren't worth a hoot. I have it on good evidence that Carol got an abortion herself after a high school sweetheart got her pregnant.
- Argument against the person, abusive.
 - Appeal to unqualified authority.
 - No fallacy.
 - Appeal to the people.
 - Tu quoque*.

INSTRUCTIONS: Select the correct answer for the following multiple choice questions.

- ___ 18. The categorical proposition "Some clinical trials are not pointless experiments" is an:
- I-type.
 - U-type.
 - E-type.
 - O-type.
 - A-type.
- ___ 19. Given the categorical proposition "No soccer balls are tetrahedrons." If the quality but not the quantity is changed, the resulting proposition is:
- All soccer balls are not tetrahedrons.
 - All soccer balls are tetrahedrons.
 - Some soccer balls are tetrahedrons.
 - Some soccer balls are not tetrahedrons.
 - All tetrahedrons are soccer balls.
- ___ 20. Given the categorical proposition "All elections are turning points." If both the quality and the quantity are changed, the resulting proposition is:
- All elections are not turning points.
 - Some turning points are not elections.
 - No elections are turning points.
 - Some elections are turning points.
 - Some elections are not turning points.

INSTRUCTIONS: In the questions below you are given a statement, its truth value in parentheses, and an operation/relation to be performed on that statement. You must identify the new statement and the truth value of the new statement. Take the Aristotelian standpoint and assume that 'A' and 'B' denote things that actually exist.

- ___ 21. Some A are not B. (F) Contrapositive
- Some B are not non-A. (F)
 - Some non-B are not non-A. (F)
 - Some A are B. (T)
 - Some non-B are not non-A. (Und.)
 - Some B are not A. (Und.)
- ___ 22. Some non-A are B. (T) Contradictory
- No non-A are B. (F)
 - Some non-A are not B. (F)
 - Some A are not B. (Und.)
 - No non-B are A. (F)
 - All non-A are B. (F)

- _____ 23. Some A are B. (T) Obverse
 a. Some B are A. (T)
 b. Some non-B are non-A. (T)
 c. Some non-A are not non-B. (T)
 d. Some A are not non-B. (T)
 e. Some non-A are not B. (Und.)
- _____ 24. All A are non-B. (F) Converse
 a. All non-B are A. (F)
 b. No A are non-B. (Und.)
 c. Some A are not non-B. (T)
 d. All B are non-A. (Und.)
 e. All non-B are A. (Und.)
- _____ 25. All non-A are B. (T) Subalternation
 a. Some A are not B. (F)
 b. Some A are non-B. (T)
 c. Some non-A are B. (T)
 d. No non-A are B. (F)
 e. Some A are B. (T)
- _____ 26. No A are non-B. (F) Contrary
 a. All A are non-B. (Und.)
 b. All A are non-B. (T)
 c. Some A are non-B. (T)
 d. No non-B are A. (T)
 e. No non-B are A. (F)

INSTRUCTIONS: In the questions below you are given a statement, its truth value in parentheses, and a new statement. You must determine how the new statement is related to the given statement and determine the truth value of the new statement. Take the Aristotelian standpoint and assume that 'A' and 'B' denote things that actually exist.

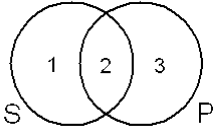
- _____ 27. Some A are not B. (T) No A are B.
 a. Subcontrary. (Und.)
 b. Subalternation. (Und.)
 c. Contrapositive. (T)
 d. Obverse. (T)
 e. Contradictory. (F)
- _____ 28. Some A are not non-B. (F) All A are non-B.
 a. Contrary. (T)
 b. Subalternation. (F)
 c. Obverse. (F)
 d. Contradictory. (T)
 e. Subalternation. (Und.)
- _____ 29. Some non-A are B. (F) Some non-B are A.
 a. Contrapositive. (Und.)
 b. Obverse. (F)
 c. Converse. (T)
 d. Contrapositive. (F)
 e. Converse. (F)

INSTRUCTIONS: Select the answer that best characterizes the following arguments. Adopt the Aristotelian standpoint.

- _____ 30. All trolls are ugly creatures. Therefore, no trolls are beautiful creatures.
- Invalid; illicit obversion.
 - Invalid; illicit contrary.
 - Invalid; existential fallacy.
 - Invalid; illicit contraposition.
 - Valid; no fallacy.
- _____ 31. Some restaurants are not high tech operations. Therefore, no restaurants are high tech operations.
- Invalid; illicit conversion.
 - Invalid; illicit subalternation.
 - Valid; existential fallacy.
 - Valid; no fallacy.
 - Invalid; illicit contrary.
- _____ 32. No tooth fairies are philanthropists. Therefore, it is false that all tooth fairies are philanthropists.
- Invalid; existential fallacy.
 - Invalid; illicit contrary.
 - Valid; no fallacy.
 - Invalid; illicit contraposition.
 - Invalid; illicit subalternation.
- _____ 33. Some flying horses are not zebras. Therefore, some zebras are not flying horses.
- Invalid; illicit conversion.
 - Invalid; existential fallacy.
 - Invalid; illicit subcontrary.
 - Invalid; illicit contraposition.
 - Valid; no fallacy.
- _____ 34. It is false that no landlords are entrepreneurs who evict tenants. Therefore, all landlords are entrepreneurs who evict tenants.
- Invalid; illicit contrary.
 - Valid; no fallacy.
 - Invalid; existential fallacy.
 - Invalid; illicit conversion.
 - Invalid; illicit subcontrary.
- _____ 35. It is false that some leprechauns are not cobblers. Therefore, it is false that no leprechauns are cobblers.
- Valid; existential fallacy.
 - Invalid; illicit contrary.
 - Valid; no fallacy.
 - Invalid; illicit subalternation.
 - Invalid; existential fallacy.

INSTRUCTIONS: Fill in the Venn diagrams for the following statements.

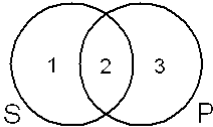
- _____ 36. No S are P. (Boolean standpoint)



After filling in the diagram,

- Area 1 is shaded, and there is a circled X in Area 2.
- Area 2 is shaded, and there is a circled X in Area 1.
- Area 2 is shaded, and there are no other marks.
- There is an X in Area 2.
- Area 3 is shaded, and there is a circled X in Area 2.

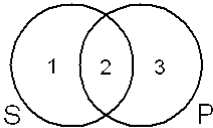
- _____ 37. Some S are not P. (Aristotelian standpoint)



After filling in the diagram,

- There is an X in Area 3.
- There is an X in Area 1.
- Area 1 is shaded.
- There is an X in Area 2.
- Area 2 is shaded, and there is a circled X in Area 1.

- _____ 38. All S are P. (Aristotelian standpoint)



After filling in the diagram,

- There is an X in Area 1.
- Area 2 is shaded.
- Area 1 is shaded, and there is a circled X in Area 2.
- Area 3 is shaded.
- Area 1 is shaded, and there are no other marks.

Syllogistic Form 1B

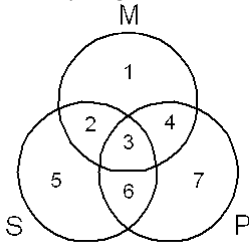
Given the following syllogistic form:

Some P are M.

No M are S.

Some S are P.

- _____ 39. For Syllogistic Form 1B, after filling in the Venn diagram,



- a. Areas 2 and 3 are shaded, and there is an X on the line between Areas 1 and 4.
 b. Areas 2 and 3 are shaded, and there is an X in Area 4.
 c. Areas 3 and 4 are shaded, and there is an X in Area 2.
 d. Areas 1 and 4 are shaded, and there is an X in Area 3.
 e. Areas 2 and 3 are shaded, and there is an X on the line between Areas 4 and 7.
- _____ 40. For Syllogistic Form 1B, the correct mood and figure is:
- a. **IEI-3**
 b. **EIE-4**
 c. **IEI-1**
 d. **EIE-1**
 e. **IEI-4**
- _____ 41. For Syllogistic Form 1B, the answer from the Boolean standpoint is:
- a. Invalid, drawing an affirmative conclusion from a negative premise.
 b. Invalid, illicit major.
 c. Invalid, existential fallacy.
 d. Invalid, undistributed middle.
 e. Valid, no fallacy.

Syllogistic Form 2B

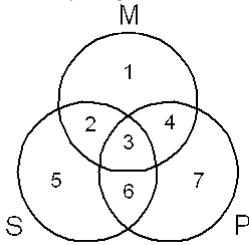
Given the following syllogistic form:

No M are P.

All M are S.

Some S are not P.

- _____ 42. For Syllogistic Form 2B, after filling in the Venn diagram,



- a. Areas 2, 3, and 4 are shaded, and there is a circled X in area 1.
 b. Areas 2, 3, 6, and 7 are shaded, and there is a circled X in Area 5.
 c. Areas 1 and 4 are shaded, and there is an X on the line between Areas 2 and 5.
 d. Areas 1, 3, and 4 are shaded, and there is a circled X in Area 2.
 e. Areas 1, 3, and 4 are shaded, and there is a circled X in area 7.
- _____ 43. For Syllogistic Form 2B, the correct mood and figure is:
- a. **EAO-1**
 b. **EAO-2**
 c. **EAO-3**
 d. **AEO-2**
 e. **OAE-4**
- _____ 44. For Syllogistic Form 2B, the answer from the Boolean standpoint is:
- a. Invalid, existential fallacy.
 b. Invalid, drawing a negative conclusion from affirmative premises.
 c. Valid, no fallacy.
 d. Invalid, illicit minor.
 e. Invalid, exclusive premises.

Syllogistic Form 3B

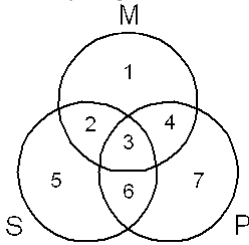
Given the following syllogistic form:

No M are P.

Some S are not M.

Some S are not P.

- _____ 45. For Syllogistic Form 3B, after filling in the Venn diagram,



- a. Areas 3 and 4 are shaded, and there is an X on the line between areas 6 and 7.
 b. Areas 2 and 3 are shaded, and there is an X in Area 6.
 c. Areas 3 and 4 are shaded, and there is an X on the line between Areas 2 and 5.
 d. Areas 3 and 4 are shaded, and there is an X in Area 6.
 e. Areas 3 and 4 are shaded, and there is an X on the line between areas 5 and 6.
- _____ 46. For Syllogistic Form 3B, the correct mood and figure is:
- a. **EII-1**
 b. **OOE-4**
 c. **EOO-4**
 d. **EOO-1**
 e. **AOO-1**
- _____ 47. For Syllogistic Form 3B, the answer from the Boolean standpoint is:
- a. Invalid, existential fallacy.
 b. Invalid, exclusive premises.
 c. Invalid, undistributed middle.
 d. Valid, no fallacy.
 e. Invalid, illicit minor.
- _____ 48. Given the following syllogism,

All horses are mammals.

No spiders are mammals.

Some spiders are not horses.

This syllogism is:

- a. Valid from the Boolean standpoint.
 b. Invalid from the Aristotelian standpoint.
 c. Valid from the Aristotelian standpoint because spiders exist.
 d. Valid from the Aristotelian standpoint because horses exist.
 e. Valid from the Aristotelian standpoint because mammals exist.

Problem

INSTRUCTIONS: The following problems relate to the counterexample method.

49. **PART A**

If music pirating continues, then property rights are ignored. Thus, if property rights are ignored, then recording artists will be cheated, because if music pirating continues, then recording artists will be cheated.

Which of the following correctly expresses the form of this argument?

- | | |
|--------------------------------------------------------|--------------------------------------------------------|
| a. If M then P.
<u>If P then R.</u>
If M then R. | d. If M then P.
<u>If M then R.</u>
If P then R. |
| b. If P then R.
<u>If M than P.</u>
If M then R. | e. If R then P.
<u>If M then P.</u>
If M then R. |
| c. If R then M.
<u>If P then M.</u>
If P then R. | |

PART B

Which of the following substitutions proves the argument invalid?

- M = Neil Armstrong has walked on the moon, P = Neil Armstrong is a human, R = Neil Armstrong is an astronaut.
- M = Paris Hilton has walked on the moon, P = Paris Hilton is a human, R = Paris Hilton is an astronaut.
- M = Britney Spears makes CDs, P = Britney Spears is a singer, R = Britney Spears is a human.
- M = Nicole Kidman programs computers, P = Ben Affleck sells fertilizer, R = Jennifer Lopez raises elephants.
- M = Brad Pitt stars in movies, P = Brad Pitt is an actor, R = Brad Pitt is a human.

Bonus Questions

Write a short answer to each of the following.

50. Is the following argument valid or not? If so, why? If not, why not? (5 points)

All syllogisms that satisfy the five rules for the syllogism are valid.

All AAA-1 syllogisms are syllogisms that satisfy the five rules for the syllogism.

Therefore, all AAA-1 syllogisms are valid.

51. You are watching a basketball game with your friend. Joe Smith, your favorite player, enters the game with a life-time Field-Goal Percentage of 50% (that is, he makes 50% of the shots he takes). He is something of a ball hog in this game. You see him make 10 shots in a row, then miss 10 shots in a row, then make 10 shots in a row, and then miss 10 shots in a row -- all by the end of the Third Quarter! It's in the Fourth Quarter now, and he makes 5 shots in a row. What if, at this point, your friend says, "I'll bet you 3 to 2 that he *misses* the next shot." (That is, your friend is saying she will pay you \$2 if Smith makes the shot, but you will have to pay her \$3 if Smith misses it. In other words, if you accept the bet, you are acting as if the odds are *better* than 50:50 that he will make his next shot; if you accept the bet, you are saying to yourself, "The odds are quite good that I'll make \$2, while the odds are not that good that I'll lose \$3.") Question: Is this a good bet? If you accept it, are you guilty of fallacious reasoning? Why or why not? Is your friend guilty of fallacious reasoning in proposing the bet or is she being clever? What is the fallacy that is at issue here? (5 pts.)

**PHI 120 Summer 2009 Mid-Term
Answer Section****MULTIPLE CHOICE**

1. ANS: B PTS: 2
2. ANS: E PTS: 2
3. ANS: D PTS: 2
4. ANS: C PTS: 2
5. ANS: E PTS: 2
6. ANS: B PTS: 2
7. ANS: C PTS: 2
8. ANS: C PTS: 2
9. ANS: A PTS: 2
10. ANS: A PTS: 2
11. ANS: C PTS: 2
12. ANS: E PTS: 2
13. ANS: A PTS: 2
14. ANS: C PTS: 2
15. ANS: A PTS: 2
16. ANS: B PTS: 2
17. ANS: E PTS: 2
18. ANS: D PTS: 2
19. ANS: B PTS: 2
20. ANS: E PTS: 2
21. ANS: B PTS: 2
22. ANS: A PTS: 2
23. ANS: D PTS: 2
24. ANS: E PTS: 2
25. ANS: C PTS: 2
26. ANS: A PTS: 2
27. ANS: B PTS: 2
28. ANS: D PTS: 2
29. ANS: A PTS: 2
30. ANS: E PTS: 2
31. ANS: B PTS: 2
32. ANS: A PTS: 2
33. ANS: A PTS: 2
34. ANS: A PTS: 2
35. ANS: E PTS: 2
36. ANS: C PTS: 2
37. ANS: B PTS: 2
38. ANS: C PTS: 2
39. ANS: B PTS: 2
40. ANS: E PTS: 2

- 41. ANS: A PTS: 2
- 42. ANS: D PTS: 2
- 43. ANS: C PTS: 2
- 44. ANS: A PTS: 2
- 45. ANS: E PTS: 2
- 46. ANS: D PTS: 2
- 47. ANS: B PTS: 2
- 48. ANS: C PTS: 2

PROBLEM

49. ANS:

- A. d
- B. b

PTS: 4

SHORT ANSWER

50. ANS:

This begs the question -- that is, it is circular.

PTS: 1

51. ANS:

Dogma: This is an instance of the gambler's fallacy.

PTS: 1

A 10.

E 17.

D 23.

E 5.

C 11.

E 24.

B 1.

D 18.

B 6.

C 25.

E 12.

B 19.

C 7.

A 26.

E 2.

A 13.

E 20.

C 14.

D 3.

C 8.

B 27.

A 15.

B 21.

D 28.

A 9.

C 4.

B 16.

A 22.

A 29.

- E 30. C 36.
- B 31. B 39. D 42. E 45.
- A 32. B 37.
- A 33. E 40. C 43. D 46.
- A 34. C 38. A 41. A 44. B 47.
- E 35. C 48.