Unit 9 - Week 7

Assignment 7

Due date: Monday, April 18, 2011

Section A

1. Which of the following rules of inference would not be permitted by a statement \( \neg (A \land B) \) in the context of a logical argument?
   A. Modus Ponens
   B. Modus Tollens
   C. Hypothetical Syllogism
   D. All of the above

2. Which of the following is a common mistake in logical reasoning?
   A. Assuming that because two events occurred together, one event caused the other
   B. Using irrelevant information to support a claim
   C. Overlooking the possibility of alternative explanations
   D. All of the above

3. Which of the following is an example of a tautology?
   A. \( p \lor \neg p \)
   B. \( p \land \neg p \)
   C. \( p \lor \neg p \lor p \)
   D. \( p \land \neg p \lor p \)

4. Which of the following is an example of a contradiction?
   A. \( p \lor \neg p \)
   B. \( p \land \neg p \)
   C. \( p \lor p \)
   D. \( p \land p \)

Section B

5. Which of the following is an example of a valid logical argument?
   A. \( p \rightarrow q \) and \( q \rightarrow r \) therefore \( p \rightarrow r \)
   B. \( p \land q \) and \( q \land r \) therefore \( p \lor r \)
   C. \( p \lor q \) and \( q \lor r \) therefore \( p \equiv r \)
   D. All of the above

6. Which of the following is an example of a sound logical argument?
   A. \( p \land q \) and \( q \land r \) therefore \( p \lor r \)
   B. \( p \land q \) and \( q \land r \) therefore \( p \land r \)
   C. \( p \lor q \) and \( q \lor r \) therefore \( p \lor r \)
   D. All of the above

Section C

7. Which of the following is an example of a logical fallacy?
   A. Ad hominem
   B. Straw man
   C. False dilemma
   D. All of the above

8. Which of the following is an example of a logical fallacy?
   A. Ad hominem
   B. Straw man
   C. False dilemma
   D. All of the above

Section D

9. Which of the following is an example of a logical fallacy?
   A. Ad hominem
   B. Straw man
   C. False dilemma
   D. All of the above

10. Which of the following is an example of a logical fallacy?
    A. Ad hominem
    B. Straw man
    C. False dilemma
    D. All of the above

Section E

11. Which of the following is an example of a logical fallacy?
    A. Ad hominem
    B. Straw man
    C. False dilemma
    D. All of the above

12. Which of the following is an example of a logical fallacy?
    A. Ad hominem
    B. Straw man
    C. False dilemma
    D. All of the above