Introduction to Logic

Test 1

**Part I**. The following passages contain arguments. Label each statement as:

(a) premise, (b) conclusion, (c) not part of the argument

(1) If you don’t eat your meat, you can’t have any pudding. (2) And little Sid didn’t eat his meat, (3) so I guess he doesn’t get any pudding.

(4) The killer was either Frankie California, or Anthony the Hat. (5) We know from inside sources that it was not Anthony the Hat. (6) Therefore, it was Frankie California.

(7) There is no question that nuclear war is immanent. (8)All the leading nuclear physicists who designed the nuke bombs are saying so, (9) and they would know.

(10) I think tax indexing is the best cure for inflation. (11) It would give Congress less of our money to waste, (12) and it would create confidence in the money market.

(13) Yesterday when I was at the zoo I saw a gorilla eating its own vomit. (14) It just goes to show what truly disgusting creatures they are. (15) The zoo is fun though, for other reasons.

(16) Unemployment is down. (17) The stock market is up. (18) I believe this shows that the recession is over. (19) Why, even the budget deficit is shrinking.

**Part II** Some of the following passages contain arguments. Some do not. Circle (I highlighted) the letter of the answer that best describes the type of passage.

Label as: (a) argument (b) conditional statement (c) explanation (d) example / illustration or (e) Series of statements

1. It is the policy of Macomb Community College that no student work is to be assigned or accepted after the semester is over. This includes late papers, make-up exams, and other similar items.
2. Food shortages in the Third World are increasing in frequency, and the high oil prices have taken their toll. The Third World is, therefore, in desperate economic straits.
3. There aren’t any Nazis living in Argentina today, if there ever were. By now they would have to be over 95 years old, and most people don’t live that long.
4. There are a number of movies that parody the audience’s reactions to scenes in the movie. Tarantino’s “Inglorious Basterds” is one example, and “Natural Born Killers” is another.
5. Being moral or ethical means obeying ancient established law or custom. Whether one submits to it with difficulty or gladly, that is immaterial; it is enough that one does it.
6. If anyone is in this house, they are members of the Jones family.
7. I am sitting in my car turning the key in the ignition and nothing is happening. I have a confused look on my face. You approach and say, “Your car won’t start because you left your lights on.” You have given me a(n)
8. We approach my car in the parking lot and I say I’m going home. You point to my headlights and say, “Your car won’t start, because you left your lights on.” You have given me a(n)

**Part III.** Answer the two questions after each argument.

All whales are fish, as everyone knows. Furthermore, all fish have scales. It follows that whales have scales.

1. Is it (a) deductive or (b) inductive?
2. Is it (a) valid (b) strong or (c) neither valid nor strong

Since the square root of 2 is irrational, it follows that there is no proper fraction that is equal to the square root of 2.

1. Is it (a) deductive or (b) inductive?
2. Is it (a) valid (b) strong or (c) neither valid nor strong

I would expect that Kelly and Nicole know each other quite well. After all, they are second cousins.

1. Is it (a) deductive or (b) inductive?
2. Is it (a) valid (b) strong or (c) neither valid nor strong

We have mixed bleach and ammonium in this bucket 25 times now. Every time so far, lethally poisonous fumes have emerged from the bucket. It is highly likely that the next time we mix bleach and ammonium under similar conditions, it will produce poisonous fumes.

1. Is it (a) deductive or (b) inductive?
2. Is it (a) valid (b) strong or (c) neither valid nor strong

Al, Joe, and Mike got very sick about 30 minutes after eating the steak. Vertis and Leonard had the chicken and they were fine. We can only conclude that the steak, or something it was cooked in, was probably what made them sick.

1. Is it (a) deductive or (b) inductive?
2. Is it (a) valid (b) strong or (c) neither valid nor strong

**Part IV.** For the following exercises, choose the answer that best describes the type of definition given.

1. Lexical, (b) Stipulative, (c) Precising, (d) Theoretical, or (e) Persuasive
2. For our purposes here, “rodents of unusual size (ROUS’s)” will refer to rodents that weigh more than 50 lbs.
3. The “Spork” is the culmination of all human progress and achievement, combining the functionality of multiple previously existing utensils, and eliminating clutter at the dinner table.
4. The “force” affecting any two 2 objects is the product of their masses times the gravitational constant divided by the square of the distance between them.
5. We define “academic excellence” as the achievement of a grade point average greater than or equal to 3.5.
6. A “cat” is a feline animal. Cats are typically quadrupeds, with triangular shaped heads and proportionately large canine teeth.
7. I will use the phrase, “vertigo of freedom” to mean, not fear of falling from a very high precipice, but the fear of jumping from one.

**Part V**. Assume that the following are proposed as lexical definitions. Choose the answer that best identifies the primary problem with each of them.

1. Too broad (b) too narrow (c) BOTH too broad and too narrow (d) circular or

(e) non-literal

1. Cat: a type of animal.
2. Lion: the king of the jungle.
3. Terrorist: a person who engages in acts of terrorism
4. Cook: a woman who works in a restaurant.
5. Insect: an ant or a bumblebee.

Answers

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| **Part I** | **Part II** | **Part III** | **Part IV** | **Part V** |
| 1. A 2. A 3. B 4. A 5. A 6. B 7. B 8. A 9. A 10. B 11. A 12. A 13. A 14. B 15. C 16. A 17. A 18. B 19. A | 1. D 2. A 3. A 4. D 5. E 6. B 7. C 8. A | 1. A 2. A 3. A 4. A 5. B 6. C 7. B 8. B 9. B 10. B | 1. C 2. E 3. D 4. C 5. A 6. B | 1. A 2. E 3. D 4. C 5. B |