

Phil. 110: Logic and Critical Thinking Fall 06 Pre-test 1

I. (5 points) Completion. Fill in the blank in each case.

1. If two propositions p and q are related so that they always have opposite truth values, they are called _____ propositions.
2. The _____ of a concept are concrete objects that taken as a whole comprise the extension of the concept
3. ANIMAL is a genus with respect to DOG but a species with respect to _____.
4. According to our rules for definitions, a good definition must not _____.
5. The sentence: MSU students who live in the dorms have an average GPA of 3.0, contains a _____ clause.

II. (10 points). For each of the following concepts provide 3 referents. Having done this, find another concept to which the three referents can be said to belong.

1. ACTOR

2. MOVIE

III. (8 points) Arrange only one of the following groups of terms in order of increasing abstractness.

1. integer, number, positive integer, prime number, rational number, real number.

2. animal, feline, lynx, mammal, vertebrate, wildcat

IV. (9 points) Identify the genus and differentia for one of the following definitions and then determine whether it violates rule 2. Provide counterexamples and say explicitly whether they show the definition to be too broad or too narrow.

(1) painting: picture drawn on a canvas with a brush

(2) raincoat: outer garment of plastic that repels water

V. (10 points). Each of the following definitions breaks at least one of our 6 rules for definitions. Choose three of them say which rule (except rule 2) each of the three breaks.

(i) SOBER: the condition of not being drunk;

(ii) BELIEF: the demi-cadence which closes a musical phrase in the symphony of our intellectual life;

(iii) MEANING: a property of a word contained in an explanation of its meaning;

(iv) DOG: a furry animal used by people as a plaything;

(v) ANALYSIS: the act of analyzing the contradictions in things

(vi) EATING: when you put things in your mouth and chew and swallow them

VI. (8 points). Provide a classification scheme for the following terms:

DOG, COLLIE, CARDINAL, BLUE JAY, COCKER SPANIEL, Rover, Tweety

VII. (8 points). For one of the following concepts, provide at least three different principles you might use to generate various species for the concept. (Don't give me the species, just the principles).

a. Dinnerware

b. Automobiles

VIII. (18 points). For each sentence identify the component propositions and then determine which of them are asserted and which are expressed.

1. If the weather stays lousy then I'm going to California and I'm not coming back.

2. Before Wittgenstein studied at Cambridge, he said that he visited Gottlob Frege and that Frege influenced him considerably.

3. Joe is convinced that Hitchcock directed Casablanca but Larry is aware that it was directed by John Huston.

IX. (15 points). For each of the following pairs of sentences determine whether they are contraries, contradictories, or neither.

1. (a) No borogoves are mimsy.

(b) Some borogoves are mimsy.

2. (a) Joe's dog Spot is a purebred poodle.

(b) Joe's dog Spot is not a purebred at all.

3. (a) Oscar Mayer hot dogs are less than 40% pork.

(b) Oscar Mayer hot dogs are more than 40% pork.

4. (a) Every person has a beetle.

(b) Bob is a person and doesn't have a beetle.

5. (a) It's false that some students are not attending.

(b) It's false that some students are attending.

X. (9 points). For each pair of propositions, decide whether the first proposition implies or entails the second proposition.

1. (i) Dogs are as lovable as they are intelligent. (ii) Dogs are lovable and intelligent.

2. (i) Einstein is a genius. (ii) Einstein is a genius or Einstein is a charlatan.

3. (i) If you don't read the book, you won't pass the test. (ii) If you read the book, you'll pass the test.