## LIBS 7008 Midterm Fall 2005 (Tim Kosub) (x/63) ANSWERS

- (1) Put the appropriate letter in the blank to indicate whether each of the following verbs names a kind of:
  - S = a speech act
  - C = a conversational act
  - N = neither (1 each; 5 marks total)
- N 1. to make an "mmmmm" sound
- S 2. to acknowledge that ...
- **C** 3. to intrigue someone...
- **S** 4. to have the opinion that ...
- **S** 5. to have faith that ...
- (2) Completely state Grice's Rule of Manner. (4 marks)
  - 1. Avoid obscurity of expression.
  - 2. Avoid ambiguity.
  - 3. Be brief.
  - 4. Be orderly.
- (3) Put the appropriate letter in the blank to indicate which conversational rule is *most clearly* violated by the *italicized* sentence in each of the following exchanges. Assume a standard context. (1 each; 5 marks total)
  - S =the rule of quantity or strength
  - O =the rule of quality
  - R =the rule of relevance
  - M =the rule of manner
  - N =none of the above
- **R/S** (i).A:Do you know the way to San Jose?
  - B: Put a \$100 down and buy a car.
- M/S (ii). A: How much is that doggie in the window?
  - B: It's going "for a song."
- **M** (iii). A: Who is man's best friend, outside of a dog?
  - B: Outside of a dog, a book is man's best friend. Inside of a dog, it's too dark to read.
- **R** (iv). A: How did you do on the Logic and Practical Reasoning test?
  - B: It's sure raining a lot these days.
- $\mathbf{Q}$  (v). A: So why does the meaning of life = 42?
  - B: The number just feels right.

(4) You ask a classmate, "What is the reading assignment for next Wednesday?" All they say is, "You need to read Chapter 7." Does this utterance conversationally imply that Chapter 7 is *all* you have to read for next Wednesday in this course?

Circle one: YES NO (1 mark)

Why or why not? (2 marks; 3 total)

Yes, because it is clear in this conversational situation that you wish to know all you have to read; so any speaker who was cooperating and who knew there was more to read would say so. Not to say so violates the conversational rule of Quantity.

(5) Put the appropriate letter in the blank to indicate whether each of the following series of statements is (1 each; 5 marks total):

N= not an argument

A= an argument that is neither valid nor sound

V= an argument that is valid but not sound

B= an argument that is both valid and sound

- N (i). Since time immemorial, dogs have chased cats.
- N (ii). I don't know how Jane swallowed a cow.
- **B** (iii). One thousand is an even number, and no even numbers are odd numbers; so one thousand is not an odd number.
- **A** (iv). The old lady was extremely hungry; so she swallowed a cow.
- N (v). You're stuck with me, for better or worse.
- (6) Complete the following sentences (2 each; 4 total):
  - (i). An argument is **sound** if and only if

the argument is valid and all of its premises are true.

(ii). An argument is *unsound* if and only if

the argument is either invalid or NOT all of its premises are true.

(7) Circle the appropriate letter to indicate whether each of the following statements is true or false. (1 each; 9 total)

- T (F) (i) A sound argument can have a false conclusion.
- F (ii) An argument with two true premises and a false conclusion can be valid.
- (T) F (iii) An argument with true premises and a true conclusion can be unsound.
- T F (iv) If the conclusion of a valid argument is false, then at least one of the premises must be false.
- T (F) (v) An argument with a false conclusion and all true premises can be valid.
- T F (vi). Adding the word "too" can turn a non-evaluative sentence into an evaluative sentence.
- (8) Put the appropriate letter in the blank to indicate whether each of the following words is normally used as: (1 each; 5 total)

R = reason marker

C = conclusion marker

A = assuring term

G = guarding term

D = discounting term

N =none of the above

- **D** (i) still
- **R** (ii) given that
- A (iii) nobody but a fool would believe
- N (iv) if
- N (v) these goods are marked down
- (9) The following argument is not valid as it stands:

You went to the mall.

: You need to buy something.

Put a "V" next to each of the following which. when added as a suppressed premise, would make this argument valid. If the sentence would **not** make the argument valid, put an "N" next to it. (1 each; 4 marks total)

- V (i) Whenever you go to the mall, you need to buy something.
- N (ii) If you need to buy something, you'll go to the mall.
- V (iii) If you don't need to buy something, then you won't go to the mall.
- V (iv) You won't go to the mall unless you need to buy something.
- (10) Put the following argument into standard form **AND** supply one or more suppressed premises that are as **plausible** as possible and that make the argument **valid**. Then provide a diagram **(4 marks)**

Good weather makes many students get bad grades, since good weather makes many students study outdoors, where they do not study well.

(A)

- 1. Good weather makes many students study outdoors.
- 2. Students do not study well outdoors.
- :. 3. Good weather makes many students study not well (poorly/badly). (SP) (from 1, 2)
  - 4. If/whenever students don't study well, they get bad grades. (SP)
- ... 5. Good weather makes many students get bad grades. (from 3, 4)

**Aside:** (3) is not essential. If students don't break up the premise, subtract one (1) mark.

(B)

- 1. Good weather makes many students study outdoors.
- 2. Students do not study well outdoors.
- 3. If/whenever students don't study well, they get bad grades. (SP)
- .. 4. Good weather makes many students get bad grades.

## Diagram:

- (11) Using the truth-functional connectives "&," "v," "~," "¬" and "≡," give a well-formed symbolization in propositional logic that *best* represents the literal meaning of each of the following statements. Bring out as much of the logical form as possible. Use the symbols given to you. (2 each; 4 marks total)
- (i) They will get married only if they pass the blood test, unless they have another fight.
  - M =They will get married.
  - B = They pass the blood test.
  - F = They have another fight.

$\sim F \supset (M \supset B)$	OR	$(M \supset B) \vee F$	OR $F \vee (M \supset B)$ OR
1 - (111 - 12)	010	(111 - 2)	ORIT (MBB) ORIT

(ii) Although love is a many splendoured thing, unless you're committed, it will end in heartbreak, and reduced oxytocin levels.

S = Love is a many splendoured thing.

C = You're committed (to love).

H = Love will end in heartbreak and reduced oxytocin levels.

$$S \& (\sim C \supset H)$$
 OR  $S \& (C \lor H)$  poorer:  $(\sim C \supset S) \& H$  OR  $(C \lor S) \& H$ 

(12) Put an "X" beside each of the following which is a substitution instance of " $\sim(p \vee q)$ ." Otherwise, put an "N" (1 each; 5 total)

 $\mathbf{X}$  (i)  $\sim$ (A v M)

X (ii)~ $(A \lor ~M)$ 

N (iii) A v M

 $\mathbf{N}$  (iv)  $\sim \mathbf{A} \vee \mathbf{M}$ 

 $X \quad (v) \sim [(A \lor \sim A) \lor M]$ 

(13) Using the (long or short) truth-table method, determine whether each of the following is a valid argument. For your convenience, I've put in the long truth-table grid. Explain your answers. (3 marks)

(i) 
$$\underline{J \vee (\underline{K}\&L)}$$
.  
 $\therefore (J \vee K) \& (J \vee L)$ 

**VALID** (1.5 for this; 1.5 for correct table)

			PR			CONC		
J	K	L	Ķ&L	J v (Ķ&L)	Jν	J v L	(J v K) & (J v L)	
					K			
T	T	T	T	T	T	T	T	OK
T	T	F	F	T	T	T	T	OK
T	F	T	F	T	T	T	T	OK
T	F	F	F	T	T	T	T	OK
F	T	T	T	T	T	T	T	OK
F	T	F	F	F	T	F	F	
F	F	T	F	F	F	T	F	
F	F	F	F	F	F	F	F	

If students choose the short method, they need to show that each of the three cases in which the conclusion is false, also has a false premise. **Bonus** +1 for recognizing logical equivalence.

(14) Give a formula using only " $\supset$ " and "&" together with the two variables "p" and "q" that fits into the blank at the top of the following truth table: (3 marks)

<i>p</i>	q	$(p \supset q)$	&	$(q \supset p)$
T	T	T	T	T
T	F	F	F	T
F	T	T	F	F
F	F	T	T	T