| NAME (PRINT): | | | |
|---------------|--------------|-----------------------------------|--|
| | Last/Surname | First /Given Name | |
| STUDENT #: | | SIGNATURE: | |
| | | TY OF TORONTO Arts and Science | |

Winter 2012 Final Exam

LIN200 H1S

April 16, 2012

Duration: 120 minutes

No aids allowed

| PLEASE INDICATE YOUR TUTORIAL SECTION: | | | | |
|--|------|-------|----------|--|
| T0101 | 4:00 | UC65 | Yu-Leng | |
| T5101 | 5:00 | UC65 | Yu-Leng | |
| T0102 | 4:00 | UC67 | ELODIE | |
| T5102 | 5:00 | UC67 | ELODIE | |
| T0103 | 4:00 | UC256 | JULIE | |
| T5103 | 5:00 | UC256 | JULIE | |
| T0104 | 4:00 | UC152 | IRYNA | |
| T5104 | 5:00 | UC85 | Tomoniro | |

| | VALUE | STUDENT'S SCORE |
|----------|-------|-----------------|
| Part I | 5 | |
| Part II | 18 | |
| Part III | 29 | |
| Part IV | 20 | |
| Part V | 14 | |
| Total | 86 | |

NB: Please take the time to fill out this coversheet. If you do not fill in ALL of the information requested on this page you will be docked 1 point!

Please do not write in the scoring table. This is for the graders to use.

This test is 18 pages long including the cover sheet and three blank pages at the back for rough work. The questions end on page 15.

Good luck!

Part I: The human capacity for language; language & culture (5 pts)

| 1) Given immediately below are three of Hockett's design features of human language. Match each one to the most appropriate example (see i-v) listed in the box further below. [2 pts] |
|--|
| a. Productivity (choose from i-v below) b. Arbitrariness (choose from i-v below) c. Displacement (choose from i-v below) |
| i. We form new words when there are technological innovations in our society. |
| ii. = 'the house' (English) = 'la casa' (Spanish) = 'la maison' (French) . |
| iii. Babies adopted from China and brought up by French speaking parents in Canada learn to speak English with a French accent, not a Chinese accent. |
| iv. You can tell a friend what you did last summer in a faraway place. |
| v. None of the above. |
| 2) The traditional linguistic understanding of a creole is that it has developed from a(n) (Choose the answer that best fills in the blank) [1 pt] a. Idiolect b. Pidgin c. Cultural identity d. Proto-language |
| 3) Similarities across have been taken to suggest that the human brain is hardwired to create particular patterns of language. (Choose the answer that best fills in the blank). [1 pt] a. Native American Languages b. Pidgins c. Standard dialects d. Creoles |
| 4) Decades of research (not discussed in class) suggest that the colour terminology of a language is partially responsible for how speakers of that language perceive colour. This result supports which hypothesis about language and cognition? (Write your answer in the space below)[1 pt] |
| Answer: |
| |

Part II: Morphology; Syntax (18 pts)

| 5) | How many i | norphemes | are th | ere in | the fo | llowing | sentence? | [1] | ptl |
|----|----------------|---------------|--------|----------|--------|---------|-------------|-----|-----|
| ~, | 11011 11111111 | inoi pinoimos | ca e a | .010 111 | uic ic | | SOLLEGIZOU. | L ^ | Pu |

| | The kids | laughed | loudly | about | their very | unst | vlish | quest. |
|--|----------|---------|--------|-------|------------|------|-------|--------|
|--|----------|---------|--------|-------|------------|------|-------|--------|

| a) | 5 |
|----|---|
|----|---|

- b) 10
- c) 12
- d) 14
- e) 16
- f) 18

6) There is something odd about the derived word *uncola*, a form introduced in advertisements for a popular soft drink. Why does it sound so unnatural? Your answer should make reference to grammatical properties of the prefix *un*-. [2 pts]

7) Here are some words from Isleta, a language spoken in New Mexico. Answer questions (a)-(d) below. [3 pts]

| [temiban] | I went | [mimiaj] | he was going |
|----------------------|-------------------|------------|--------------|
| [amiban] | you went | [tewanban] | I came |
| [temiwe] | I am going | [tewanhi] | I will come |
| a What is the Isleta | mornheme that mea | ns "I"? | |

- a. What is the Isleta morpheme that means "I"?
- b. What is the Isleta morpheme that means "come"?
- c. What is the Isleta morpheme that means "you"?
- d. How would you form the word meaning He will go in Isleta?

8) There are two possible semantic interpretations for the following sentence.

Noisy girls and boys played in the park.

Under the FIRST reading, the sentence asserts that both the girls are noisy and the boys are noisy. Under the SECOND reading, only the girls are asserted to be noisy (the boys need not be). Draw the tree for the SECOND meaning using *only* the phrase structure rules given below for English. [4 pts]

English Phrase Structure Rules:

CI → NP VP NP → (Det) (AdjP) N (PP) VP → V (NP) (PP) (CP) (AdvP) AdjP → Adj (PP) AdvP → Adv PP → P NP NP → NP conj NP VP → VP conj VP

9) In order to represent the FIRST reading described in the previous question, you need to introduce a new Phrase Structure Rule. Give that rule in the space below. [2 pts]

10) Here are some simple phrase structure rules and vocabulary (including lexical category as well as English translation in single quotes) for Irish Gaelic.

```
Cl \rightarrow V \ NP \ NP
NP \rightarrow (Det) \ N \ (Adj)
Det \rightarrow an 'the'
N \rightarrow doras 'door', leabhar 'book', Seamus (proper name), cailín (girl)
```

Adj → beag 'small', mor 'big' V → chonaic 'saw', dhún 'closed'

Only two of the following sentences would be considered well-formed, according to the rules above. First, identify the ill-formed sentences using an asterisk (*), and state what phrase structure rule they violate. Then provide labeled tree diagrams for the two well-formed sentences. [6 pts]

- a. Dhún an cailín an doras mór
- b. Seamus chonaic an leabhar
- c. Dhún Seamus an beag leabhar
- d. Chonaic Seamus an cailín

Part III: Phonetics&Phonology (29 pts)

t. glottis

u. none of the above

| 11) What | feature(s) do the following speech sounds share: [f, s, Θ] (circle all relevant)? [1 pt] |
|------------|--|
| a. | voiceless |
| b. | voiced |
| | stop |
| d. | fricative |
| e. | |
| f. | alveolar |
| g. | none of the above |
| 12) What | feature(s) do the following speech sounds share: [i, u, ε] (circle all relevant)? [1 pt] |
| i. | alveolar |
| | lax |
| iii. | round |
| iv. | front |
| | tense |
| | high |
| vii. | none of the above |
| 13) What | feature(s) do the following speech sounds share: [d, z, l]? [1 pt] |
| h. | voiceless |
| i. | voiced |
| j. | stop |
| k. | fricative |
| 1. | glide |
| | alveolar |
| n. | none of the above |
| 14) Consid | der the English speech sound [k]. Which of the following are employed as articulators |
| | this sound? (If more than one articulator is used, circle all relevant articulators.) [1 pt] |
| | upper lip |
| _ | velum |
| q. | palate |
| r. | tongue |
| S. | alveolar ridge |

| to produce this sound? (Circle all relevant answers.) [1 pt] 1) upper lip 2) velum 3) palate 4) tongue 5) alveolar ridge 6) glottis 7) none of the above | | | | | | |
|---|-----------------------------------|---|--|--|--|--|
| one error. Circle the | | transcriptions. Each transcription contains ascription in the space provided. You can ask ots.] | | | | |
| bridges | [brɪjəs] | | | | | |
| leisure | [ližur] | | | | | |
| sense | [sɛns] | | | | | |
| | et kerid əwe | thography. [2 pts.] | | | | |
| ay næv tu ren | nemoəi | | | | | |
| aym nat ped tu sit hir | | | | | | |
| ænd Oŋk əba | wt prablemz al de | | | | | |
| 18) The term phonoto | actic constraints refers to allop | hones in complementary distribution. [1 pt] | | | | |
| True | False | | | | | |

15) Consider the English speech sound $[\Theta]$. Which of the following are employed as articulators

| 19) Allophones are (circle all that apply) [1 pt] | |
|--|------------------|
| a. not pronounceable b. phonetically similar c. predictable d. contrastive e. represented at the phonemic level f. all of the above g. none of the above | |
| 20) Identify the phonological process illustrated in each of the following example | ples. [4 pts.] |
| a. 'months' /man θ s/ \rightarrow [mants] | |
| b. 'hamster' /hæmstər/ → [hæmpstər] | |
| c. 'drink' /driŋk/ → [j̃riŋk] | |
| c. 'Leslie' /lɛsli/ → [lɛzli] | |
| 21) Draw a fully labeled syllable structure for the word <i>implant</i> . The transcript you. [2 pts] | ion is given for |
| ı m p l æ n t | |
| 22) Why is the sequence [lp] bad in [*lpam] but ok in in the word 'help' [hɛlp] | ? [3 pts] |

23) Consider the following data from Sindhi, a language spoken in India and Pakistan, and answer the two questions below. [4 pts]

| [pənu] | leaf | [tənu] | bottom |
|---------|--------------|---------|---------|
| [veju] | opportunity | [kʰəto] | sour |
| [šeki] | รมรpicions | [bəju] | r1111 |
| [gədo] | dull | [bənu] | forest |
| [dəru] | door | [bəc'u] | be safe |
| [pʰənu] | snake's hood | [jəju] | judge |

- a. According to the data above, [p] and [ph] in Sindhi are (circle all that apply):
 - i. in complementary distribution
 - ii. contrastive
 - iii. allophones of different phonemes
 - iv. allophones of the same phoneme
 - v. found in at least one minimal pair
 - vi. none of the above
- b. According to our data, [d] and [t] in Sindhi are:
 - i. in complementary distribution
 - ii. contrastive
 - iii. allophones of different phonemes
 - iv. allophones of the same phoneme
 - v. found in at least one minimal pair
 - vi. none of the above

24) Italian nasals [4 pts]

Consider the data given below, from Italian. The Italian nasals [n] and [n] are allophones of a single phoneme. What is the evidence for this (be specific!)? Say which you would choose as the underlying form and justify your choice (be specific!).

| [nero] | black | [rana] | frog |
|---------|--------|---------|-------|
| [jente] | people | [aŋke] | also |
| [tenda] | tent | [faŋgo] | mud |
| [tɪnta] | dye | [tiŋgo] | I die |
| | | | |

| Evidence: |
|------------------|
| Underlying Form: |
| Justification: |

Part IV: Language Acquisition (20 pts)

| 25) We know that very young children learn by imitation because they will use the correct grammatical structure after being corrected by a parent. [1 pt] | | | | |
|---|--|---|--|--|
| Tr | ue | False | | |
| | nateness Hypothesis propo aids them in the acquisition | ses that children are equipped with Universal of language. [1 pt] | | |
| Tr | ue | False | | |
| 27) In the acquisit | tion of phonology, which pl | lace of articulation is acquired earliest? [1 pt] | | |
| | Lenneberg, the cross-lingui | stic uniformity of milestones in language [1 pt] | | |
| b. c. d. | Behaviourist conditioning Biological innateness Generative grammar Perceptual assimilation None of the above | | | |
| | | "taked" or "goed" illustrate of a kind of dren known as [1 pt] | | |
| h. i. | Analogical levelling Comparative reconstruction Neogrammarianism Overgeneralization None of the above | on | | |
| all that apply) [1] a. Syntacti b. The "wi c. Underer | ot] ic bootstrapping hole object principle" ktension rm over colour" principle the above | plicated in the acquisition of word meaning? (Circle | | |

| perceive th | nem. [1 pt] | ionological contrasts as soc | on as they are able to |
|---------------------|---|-------------------------------|--------------------------|
| Tro | ue False | | |
| 32) What i | s the name of the Principle or H | ypothesis that language acc | quisition is compromised |
| after an ear | rly age? | | [1 pt] |
| 33) Give to [2 pts] | wo pieces of evidence that suppo | ort the Principle referred to | in the previous question |
| | | | |
| | | | |
| represent, | the the utterances in Table 1 (be and give the order in which the at them from 1 to 4, where 1 is the | child is likely to have learn | ed to produce them, by |
| | Table 1: Utterances produc | ced by one child during his | first 5 years. |
| | | Name of stage | Order number |
| (a) | [gɪv kuki] | | |
| <u>[b)</u> | [kın ju gıv mi ə pretsəl]? | | |
| (c) | [wi km go tu ðə zu]? | | |
| (d) | [mamij] | | |
| <u>e</u>) | [ba ba ba ma ma ma] | | |

35) Which of the early phonetic processes discussed in class is illustrated in the following data? [1 pt]

Speech samples from a two-year-old boy

| Adult word | Child's pronunciation | Adult word | Child's pronunciation |
|------------|-----------------------|------------|-----------------------|
| sun | [sʌn] | snake | [nek] |
| see | [si] | sky | [kaj] |
| spoon | [pun] | stop | [tap] |

36) Which of the following rules BEST describes how the child's pronunciation differs from an adult's in Table 7? [1 pt]

Table 7: Speech samples from another two-year-old boy

| Adult word | Child's pronunciation | Adult word | Child's pronunciation |
|------------|------------------------------------|------------|-----------------------|
| bed | [bɛt] | bus | [bas] |
| wet | [wɛt] | buzz | [bas] |
| egg | [ɛk] | man | [mæn] |
| rake | [rek] | door | [dər] |
| tub | [tʌp] | some | [sam] |
| soap | [sop] | boy | [boj] |
| k. A | All consonants delete in the envir | ronment# | ŕ |

- 1. All consonants become voiceless in the environment #
- m. All obstruents become voiceless in the environment ____#
- n. All consonants become voiceless in the environment V
- o. There is no regular rule that can accurately describe what this boy is doing.

| 37) Werker & Desjardins describe an experiment in which English speaking adults were asked to discriminate Zulu clicks. The subjects performed quite well and these results were taken to support the Perceptual Assimilation Hypothesis. What is this hypothesis and how is it supported by these experimental results? [3 pts] |
|--|
| |
| |
| Part V: Language Change; evolution of language (14 pts) |
| 38) The ancestral language from which English developed is [1 pt] p. Latin q. French r. German s. Proto-Indo-European t. Proto-Romance |
| 39) What is the evolutionary Big Bang theory of language origins? Why has it been proposed and why is it controversial? (Complete the sentences started for you below)[3 pts] |
| The Big Bang theory is |
| It was proposed in order to account for |
| It is controversial because |

40) **Comparative reconstruction.** The following data are from four daughter languages of Proto-Tupi-Guarani. Build a correspondence set table below for the consonants (you can ignore the vowels) and identify the proto-sound for each set. If you see evidence for lenition, write 'L' next to the proto-sound. ([?] is a voiceless glottal stop). [10 pts]

| | <u>Guarani</u> | <u>Tupinamba</u> | Siriono | Guarayo | English gloss |
|----|----------------|------------------|---------|---------|---------------|
| 1. | [kiči] | [kišiŋ] | [kiši] | [kiči] | cut |
| 2. | [či] | [šiŋ] | [ši] | [či] | white |
| 3. | [me?e] | [me?e] | [mee] | [mee] | give |
| 4. | [ki] | [kib] | [ki] | [ki] | louse |
| 5. | [kiʔa] | [kiʔa] | [kia] | [kia] | dirty |
| 6. | [abači] | [abaši] | [abaši] | [abači] | corn |

Table of correspondences

| Example numbers | Guarani | Tupinamba | Siriono | Guarayo | Proto-Tupi- Guarani |
|-----------------|---------|-----------|---------|---------|------------------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | } |

LIN200H1S Winter 2012 Final Exam

This page is blank for rough work

LIN200H1S Winter 2012 Final Exam

This page is blank for rough work

This page is blank for rough work

7