

Language Typology and Universals

End Semester Exam – Spring 2024

4th May, 2024

Total Marks: 100
Time: 3 hours

- ❖ Answer all the questions in the booklet provided.
- ❖ Answer according to the marks assigned with relevance to class discussions.
- ❖ Extra answers (from the choice) will not be graded.
- ❖ No clarification will be given during the duration of the exam.

1. Write short notes on any FIVE: [5 x 6 = 30 marks]

- ☒ a. Phonological universals
 - ☒ b. Language Acquisition Device [LAD] and Universal Grammar
 - ☒ c. Colour term hierarchy
 - ☒ d. Animacy hierarchy
 - ☒ e. Politeness reflection in language
 - ☒ f. Syntactic universals in South Asian languages
 - ☒ g. Reduplication and Echo words
 - ☒ h. Sound changes in borrowed words
- 15:30

2. Compare and contrast any FOUR pairs: [4 x 8 = 32 marks]

- ☒ a. Analytical vs Synthetic languages
 - ☒ b. Implicational vs Statistical universals
 - ☒ c. Assimilation vs Dissimilation
 - ☒ d. Chomskyan vs Greenbergian approaches
 - ☒ e. Broca's aphasia vs Wernicke's aphasia
 - ☒ f. Language development (in child) vs Language loss
- 15:50

3. Answer ALL questions: [4 x 3 = 12 marks]

- ☒ a. With examples show how gender feature is encoded in Indian languages.
 - ☒ b. Using examples show the mirror image relation between verb final and verb non-final languages.
 - c. Show how relative clause constructions are similar/different in English and their equivalents in your mother tongue.
 - d. 'A subject having nominative case in English may have a different case in another language.' Explain this by taking examples from the languages you know.
- 16:15

4. With suitable examples for the following universals given by Greenberg, show if they are true for the languages you know (say, for English and your first language). [12 marks]

- 16:45
- (a) (i) "In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes."
- (ii) "If in a language with dominant SOV order there is no alternative basic order, or only OSV as the alternative, then all adverbial modifiers of the verb likewise precede the verb."
- (iii) "With well more than chance frequency, when question particles or affixes are specified in position by reference to the sentence as a whole, if initial, such elements are found in prepositional languages, and, if final, in postpositional."
- (iv) "In conditional statements, the conditional clause precedes the conclusion as the normal order in all languages."
- (b) (i) "With overwhelmingly more than chance frequency, languages with dominant order VSO have the adjective after the noun."
- (ii) "When the descriptive adjective precedes the noun, the demonstrative and the numeral, with overwhelmingly more than chance frequency, do likewise."
- (iii) "When the general rule is that the descriptive adjective follows, there may be a minority of adjectives which usually precede, but when the general rule is that descriptive adjectives precede, there are no exceptions."
- (iv) "When any or all of the items (demonstrative, numeral, and descriptive adjective) precede the noun, they are always found in that order. If they follow, the order is either the same or its exact opposite."
- (v) "If some or all adverbs follow the adjective they modify, then the language is one in which the qualifying adjective follows the noun and the verb precedes its nominal object as the dominant order."
- (vi) "If in comparisons of superiority the only order, or one of the alternative orders, is standard-marker-adjective, then the language is postpositional. With overwhelmingly more than chance frequency if the only order is adjective-marker-standard, the language is prepositional."

17:15 ✓ 5. Write briefly about the language you worked on for your term paper. Share any 6 important linguistic features about this unknown language. (8 marks)

6. (a) After learning about the similarities and differences that exist among languages, share how this knowledge will have an impact in building NLP applications or contributing to LLMS. (3 marks)

17:45 (b) Why is it that humans need so little training data while LLMs must ingest vast language corpora to achieve comparable language competence? (3 marks)