MASTER OF ARTS EXAMINATION, 2017

(2nd Year, 4th Semester)

LINGUISTICS

Computational Linguistics

Course : XIII

Time : Two hours

Full Marks : 30

Answer any *three* of the followings selecting at least *one* from each part.

PART - I

1. a) Text Segmentation is an important process. How do you prove that it is relevant to your mother tongue? 5

   b) What do you mean by the two-level Morphology? Elaborate with examples referring these features. 5

2. a) Describe context free grammar and its properties with examples. 5

   b) Describe Lexical functional Grammar in brief with special reference to the levels of structure. 5

3. What do you mean by Corpus? Write a note on different aspects of the development of a Machine readable Corpus and its types. Describe its relevance of it in respect of the present context natural language processing. 1+4+5

4. a) Develop a model of FSA for the generation of simple dollars and cents . 5

   b) Develop a derivation model using the FST for the following English Adjectives: 5
       big , bigger, biggest ; clear, clearer, clearest, clearly, unclearly; happy, happier, happiest , happily.

Part – II

6. a) How do the probability of a word can be computed ? 2
   b) What is "Zeugma" test? 2
   c) Perfect synonymy is rare . Explain this 2
   d) What are the other different relations by which the hyponeym-hypernym relation can be expressed? 2
   e) Discuss the pathbase method of determining word similarity. 2

7. a) Discuss "Vauquois triangle" along with the depth of analysis . 3
   b) Discuss some linguistic problems along with examples that need to be addressed in MT. (4)
   c) Briefly discuss the three process in example based MT-matching alignment and recombination. (3)

8. Define (any 4): Synset, meronym, homonym, Speech synthesis, Chunking, flowchart, homograph-homophone 10.