

National University of Computer and Emerging Sciences, Lahore Campus

Course:	Natural Language Processing	Course Code:	CS 535
Program:	MS(Computer Science)	Semester:	Spring 2019
Duration:	30 Minutes	Total Marks:	12
Paper Date:	8 May-19	Weight	5%
Section:	CS	Page(s):	2
Exam:	Quiz 4		

Q1) Compute value of ROUGE-2 score for following summary. [4 Marks]

System Generated Summary: The quake had a preliminary magnitude of 6.9. in an area so isolated there are no roads connecting it to the outside world.

Reference Summary (Human Generated Summary): The quake had a preliminary magnitude of 6.9. An earthquake in the same region in February killed 2300 people and left thousands homeless.

Solution:

7/21

Q2) The first step in query focused multi document summarization is to simplify the sentences. Simplify following sentences using simple rules discussed in class. [4 Marks]

- Genette's bedroom desk, the biggest disaster area in the house, is a collection of overdue library books, dirty plates, computer components, old mail, cat hair, and empty potato chip bags.
- Robbie, a hot-tempered tennis player, charged the umpire and tried to crack the poor man's skull with a racket.
- The car began sliding sideways, and then it hit the tree," she said
- He died in France, as a matter of fact, and wated to be buried there.

Solution:

- Genette's bedroom desk, is a collection of overdue library books, dirty plates, computer components, old mail, cat hair, and empty potato chip bags.
- Robbie, charged the umpire and tried to crack the poor man's skull with a racket.
- The car began sliding sideways, and then it hit the tree,"
- He died in France, and wated to be buried there.

Name: _____

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Section: _____

Q3) Explain Bootstrapping method for relation extraction. **[4 Marks]**

Solution:

- Gather a set of seed pairs that have relation R
- Iterate:
 1. Find sentences with these pairs
 2. Look at the context between or around the pair and generalize the context to create patterns
 3. Use the patterns for grep for more pairs