

Total No. of Questions – [06]

Total No. of Printed Pages: [02]

PRN	
-----	--

PAPER CODE	U482-232C(ESE)
------------	----------------

MAY 2021 - ENDSEM EXAM
FINAL YEAR B. TECH. (COMPUTER ENGINEERING)
(SEMESTER - II)
COURSE NAME: PROFESSIONAL ELECTIVE V
[NATURAL LANGUAGE PROCESSING]
COURSE CODE: CSUA40182C
(PATTERN 2018)

Time: [1 Hr]

[Max. Marks: 30]

Instructions to candidates:

- 1) Answer Q.1 OR Q.2, Q.3 OR Q.4, Q.5 OR Q.6.
- 2) Figures to the right indicate full marks.
- 3) Use of scientific calculator is allowed
- 4) Use suitable data where ever required

- Q.1 a Identify correct lexical relations in the following examples. [4]
1) Happy, joyful, glad
2) Happy, sad
3) world record, a record of conversation
4) book ticket, bring me a book
- Q.1 b Classify relation between word meanings and give example for each. [6]
OR
- Q.2 a Illustrate an example to explain the Distributional Semantic Model [4]
(DSM).
- Q.2 b Explain Word Sense Disambiguation (WSD) for word 'bark' in [6]
following example.
"Cinnamon comes from the bark of the Cinnamon tree." and "The dog barked at the stranger."
- Q.3 a Model Regex for finding phone number and email [4]
- Q.3 b Write at least two features of Bootstrapping and Supervised Relation [6]
Extraction. Construct any real time example for one of the approach.
OR
- Q.4 a Apply the Latent Dirichlet Allocation [LDA] on any real time [4]
application.
- Q.4 b Suppose you have various photographs (documents) with captions [6]
(words). You want to display them in a gallery so you decide to
categorize the photographs on various themes (topics) based on
which you will create different sections in your gallery. Assume
category as k=2 (nature and city). Find out category of sentence "The

tree is in front of the building and behind a car". Assume suitable data wherever required

Q.5 a Analyze the impact of NLP in Education Sector [4]

Q.5 b "Cross Lingual Information Retrieval represent information in same way though are in different languages". Justify. [6]

OR

Q.6 a Identify at least four applications of NLP used in Education Sector [4]

Q.6 b "Semantic web describes the relations among data (i.e., resources) on the Web." Justify. [6]