**18CSD53**

**Hall Ticket Number:**

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| **IV/IV B.Tech (Regular/Supplementary) DEGREE EXAMINATION** | | | |
| **April,2023** | **Computer Science and Engineering** | | |
| **Eighth Semester** | **Natural Language Processing** | | |
| **Time:** Three Hours | | **Maximum:** 50 Marks | |
| *Answer Question No.1 compulsorily.* | | | (1X10 = 10 Marks) |
| *Answer ONE question from each unit.* | | | (4X10=40 Marks) |
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| 1. | a) | | | Define Natural Language Processing. | | CO1 | | | L2 | |  |
|  | b) | | | What is Corpus? | | CO1 | | | L1 | |  |
|  | c) | | | List different types of data attributes. | | CO1 | | | L2 | |  |
|  | d) | | | Define Context-free grammar. | | CO2 | | | L3 | |  |
|  | e) | | | What is Discourse integration? | | CO2 | | | L1 | |  |
|  | f) | | | What is corpus-raw sentence? | | CO3 | | | L2 | |  |
|  | g) | | | Define customized preprocessing. | | CO3 | | | L4 | |  |
|  | h) | | | What is NER? | | CO4 | | | L2 | |  |
|  | i) | | | List out basic features of NLP. | | CO4 | | | L2 | |  |
|  | j) | | | List the advantages of feature engineering. | | CO4 | | | L3 | |  |
|  | | | **Unit -I** | | | | | | | | |
| 2. | a) | | | Discuss the advantages of togetherness NLP and Python | | CO1 | | | L1 | | 5M |
|  | b) | | | Why do we need a corpus? Explain the corpus analysis. | | CO1 | | | L3 | | 5M |
|  | | | **(OR)** | | | | | | | | |
| 3. | a) | | | Explain the different file formats for corpora. | | CO1 | | | L2 | | 5M |
|  | b) | | | Discuss in detail web scrapping. | | CO1 | | | L2 | | 5M |
|  | | | **Unit -II** | | | | | | | | |
| 4. | a) | | | Illustrate the components of NLP. | | CO2 | | | L3 | | 5M |
|  | b) | | | Compare and contrast Syntactic analysis and Pragmatic analysis. | | CO2 | | | L2 | | 5M |
|  | | | **(OR)** | | | | | | | | |
| 5. | a) | | | Explain about Morphological analysis in NLP with an example. | | CO2 | | | L1 | | 5M |
|  | b) | | | Discuss the role of Context-free grammar in NLP. | | CO2 | | | L4 | | 5M |
|  | | | **Unit -III** | | | | | | | | |
| 6. |  | | | Differentiate basic pre-processing and customized pre-processing with example. | | CO3 | | | L2 | | 10M |
|  | | | **(OR)** | | | | | | | | |
| 7. |  | | | What is Word tokenization? Explain with an example. | | CO3 | | | L1 | | 10M |
|  | | | **Unit -IV** | | | | | | | | |
| 8. | a) | | | Discuss about basic statistical feature of NLP with example. | | CO4 | | | L4 | | 5M |
|  | b) | | | Explain the challenges of feature engineering. | | CO4 | | | L3 | | 5M |
|  | | | **(OR)** | | | | | | | | |
| 9. | |  | | | Illustrate the features generation process with example. | | CO4 | L2 | | 10M | |
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