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VISHNUPUR: BHIMAVARAM

Mid – I Question Bank

**Natural Language Processing**

**(AIML and AI&DS)**

**Unit-I**

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| **1** | What is Natural Language Processing? Explain its advantages | L1 CO1 [12M] |
| **2** | Explain the phases of NLP. | L1 CO1 [12M] |
| **3** | Explain the significance of NLP with respect to Artificial Intelligence? | L2 CO1 [12M] |
| **4** | List the recent applications of NLP and Explain in detail. | L2 CO1 [12M] |
| **5** | Explain the components of NLP. | L1 CO1 [6M] |
| **6** | Write about language and Knowledge. | L1 CO2 [12M] |
| **7** | Explain the major challenges of NLP. | L1 CO1 [12M] |
| **8** | List the earliest applications of NLP. | L2 CO2 [6M] |
| **9** | How NLP, NLG and NLU are related? | L2 CO2 [6M] |
| **10** | Explain Grammar based models? | L1 CO1 [12M] |
| **11** | Write a short note on Language modeling | L1 CO1 [6M] |
| **12** | Explain the concept of Word embedding | L2 CO1 [6M] |

**Unit-II**

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| **1** | Define regular expression. List out the properties of regular expression. | L3 CO2 [12M] |
| **2** | What do you mean by finite state automata? Explain its types. | L3 CO3 [12M] |
| **3** | Discuss briefly Syntactic Analysis in NLP? | L2 CO1 [6M] |
| **4** | Explain Morphological Parsing. | L2 CO1 [12M] |
| **5** | Explain Error Detection and correction in NLP. | L3 CO2 [12M] |
| **6** | Write about word classes. | L3 CO2 [6M] |
| **7** | Explain POS tagging in NLP | L3 CO2[12M] |
| **8** | List the properties of rule based POS Tagging | L3 CO2[6M] |
| **9** | Explain context Free Grammar with an example | L3 CO2 [6M] |
| **10** | What is Constituency Parsing in NLP? | L3 CO2 [6M] |
| **11** | Define Parsing. Explain several types of parsing in detail | L3 CO2 [12M] |

**Unit-III**

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| **1** | What is Semantic Analysis? Explain various parts of semantic analysis | L4 CO2 [12M] |
| **2** | Explain tasks involved in Semantic Analysis. | L4 CO3 [12M] |
| **3** | What is lexical semantics and give example? | L4 CO1 [6M] |
| **4** | What is an Ambiguity? Explain types of ambiguity | L4 CO1 [12M] |
| **5** | Write about Word Sense Disambiguation | L4CO2 [12M] |
| **6** | Explain Cohesion in Natural Language Processing | L4 CO2 [6M] |

|  |  | (or) |  |  |  |
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| 4. | a) |  | L2 | CO2 | [6M] |
|  |  |  |  |  |  |
|  | b) | Describe the concept of Parsing? | L3 | CO2 | [6M] |
|  |  |  |  |  |  |
| 5 |  | Elaborate the concept of Context Free Grammars. | L1 | CO3 | [6M] |
|  |  | (or) |  |  |  |
| 6 |  | How Semantic analysis is different from lexical analysis? | L4 | CO3 | [6M] |

| 1. | a) |  | L1 | CO1 | [6M] |
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|  |  |  |  |  |  |
|  | b) | What are the challenges encountered in NLP? | L2 | CO1 | [6M] |
|  |  | (or) |  |  |  |
| 2. | a) | Describe Language Modeling briefly? | L3 | CO1 | [6M] |
|  |  |  |  |  |  |
|  | b) | What are the various types of Language Models? | L1 | CO1 | [6M] |
| 3. | a) | Discuss briefly the types of finite state automata? | L2 | CO2 | [6M] |
|  |  |  |  |  |  |
|  | b) | What is the significance of Morphological Parsing in word level analysis? | L2 | CO2 | [6M] |
|  |  | (or) |  |  |  |
| 4. | a) | Illustrate Part of Speech tagging? | L4 | CO2 | [6M] |
|  |  |  |  |  |  |
|  | b) | List out various types of Morphemes. | L3 | CO2 | [6M] |
|  |  |  |  |  |  |
| 5 |  | Write short notes on Constituency Grammar. | L1 | CO3 | [6M] |
|  |  | (or) |  |  |  |
| 6 |  | Classify the elements of Semantic Analysis? | L4 | CO3 | [6M] |