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School of Computing Science and Engineering

Master of Technology in Computer Science and Engineering

Mid Term Examination - May 2024

Duration : 90 Minutes

Max Marks : 50

Sem II - R1PW201B - Natural Language Processing

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Explain the significance of WordNet Similarity in NLP. K2 (2)
- 2) Define synsets and hypernyms in the context of WordNet. K1 (3)
- 3) Explain the process of tokenization in Natural Language Processing. K2 (4)
- 4) Explain the differences between extractive and abstractive text summarization techniques in natural language processing. Provide examples and discuss the advantages and disadvantages of each approach. K2 (6)
- 5) Illustrate the working principle of Recurrent Neural Networks (RNNs) in text processing. K3 (6)
- 6) Illustrate the process of sentiment analysis in NLP with an example. K3 (9)
- 7) Analyze the use of machine learning algorithms for text classification in NLP. K4 (8)
- 8) Analyze the performance of different neural network architectures for text generation in NLP. K4 (12)

OR

- Analyze the challenges and limitations of machine learning approaches for sentiment analysis in NLP. K4 (12)