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School of Business

Bachelor of Business Administration in Business Analytics
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem V - D1UF503T - Text Analytics

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) What are some common distance metrics used in text clustering? K1 (2)
- 2) How can sentiment analysis be useful for market research? K2 (4)
- 3) How does text analytics contribute to supply chain management? K2 (6)
- 4) How is text analytics employed in the news media industry? K3 (9)
- 5) Explain the role of text analytics in the pharmaceutical industry. K3 (9)
- 6) Evaluate the reliability of a spaCy-based sentiment analysis tool for real-time sentiment tracking of news articles by analyzing its performance over a period of time. K5 (10)
- 7) How does domain-specific sentiment analysis differ from general sentiment analysis? K4 (12)
- 8) Case Study: Text Analytics Implementation at ABC Ltd. Background: ABC Ltd. is a global e-commerce company that deals with a wide range of products. The company wanted to leverage the wealth of customer feedback and interactions available in the form of online reviews, customer support tickets, and social media conversations. However, manually processing and understanding this vast amount of textual data proved to be a daunting task. To gain actionable insights, ABC Ltd. decided to adopt text analytics techniques. Objective: Implement text analytics to extract valuable insights from customer reviews, support tickets, and social media conversations. Improve customer satisfaction, product quality, and decision-making based on data-driven insights. Questions: Explain the process of text preprocessing and its importance in text analytics. Analyze how sentiment analysis and topic modeling were applied to customer data. Apply named entity recognition techniques for better data extraction. K5 (15)

- 9) Case Study: SpaCy-Based Text Analytics Implementation at XYZ Ltd. Background: XYZ Ltd. is a financial services company that handles a large volume of customer queries and feedback through emails and support tickets. The company aimed to streamline their customer support operations by automating the categorization of incoming emails and identifying priority issues. To achieve this, XYZ Ltd. decided to leverage the power of SpaCy-based text analytics. Objective: Implement SpaCy-based text analytics to automatically categorize incoming emails, identify priority topics, and provide quick responses to customer queries. Questions: Explain the role of SpaCy in text preprocessing and named entity recognition. Analyze how SpaCy's text classification capabilities were used for topic categorization. K5 (15)
- 10) Create a spaCy-based script to perform text summarization on lengthy articles and generate concise summaries while preserving key information. K6 (18)