

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

**POST GRADUATE DIPLOMA IN MANAGEMENT (2022-24)
END TERM EXAMINATION (TERM-V)**

Subject Name: **Text and Sentiment Analytics**

Time: **02.00 hrs**

Sub. Code: **PGIT52**

Max Marks: **40**

Note:

All questions are compulsory. Section A carries 5 marks: 5 questions of 1 marks each, Section B carries 21 marks having 3 questions (with internal choice question in each) of 7 marks each and Section C carries 14 marks one Case Study having 2 questions of 7 marks each.

SECTION - A

Attempt all questions. All questions are compulsory.

1×5 = 5 Marks

Questions	CO	Bloom's Level
Q. 1: (A). What is the fundamental difference between "analytics" and "text analytics"?	CO1 CO1	L2 L2
Q. 1: (B). Explain the concept of text representation in the context of natural language processing.	CO1	L2
Q. 1: (C). Why is topic mining essential in data analysis?	CO1	L2
Q. 1: (D). Discussing Part of Speech significance in understanding grammatical structures and semantic	CO1	L2
Q. 1: (E). How sentiment analysis gives product feedback.	CO1	L2

SECTION – B

All questions are compulsory (Each question have an internal choice. Attempt any one (either A or B) from the internal choice)

7 x 3 = 21 Marks

Questions	CO	Bloom's Level
Q. 2: (A). Explain Bigdata. What are its characteristics? Or	CO2	L3
Q. 2: (B). Explain one hot encoding text representation with an example.		
Q. 3: (A). Describe the role of statistical language models in the context of topic mining, emphasizing their impact on understanding and extracting topics from large datasets. Or	CO3	L3
Q. 3: (B). Discuss the challenges associated with terms “topics” in topic mining, and propose potential solutions to address these challenges.		
Q. 4: (A). Explain the challenges and techniques associated with extracting nuanced meanings from diverse forms of text, considering factors like context, ambiguity, and cultural variations. Or	CO3	L4
Q. 4: (B). Discuss the challenges associated with word sense ambiguity. Explain the Lexicon based Sentiment Analytics used for Tweet Analysis.		

SECTION - C

Read the case and answer the questions	7×02 = 14 Marks	
Questions	CO	Bloom's Level
<p>Q. 5: Case Study: Analyzing Zeiken Watches' Product Feedback on Social Media</p> <p>Zaimiene, a leader in the electronic products industry, has established a commendable market presence, as evidenced by the positive sentiments permeating social media discussions. These favorable sentiments likely stem from customer satisfaction, laudable reviews, and strategic marketing efforts, all of which contribute to Zaimiene's robust brand image. The term "robust" reflects the company's substantial impact and successful positioning as an influential entity within its sector. The analysis of these sentiments highlights Zaimiene's advantageous position relative to its competitors and underscores the company's effective market penetration and positive consumer reception, which are attributed to its focus on customer contentment and adept branding initiatives. Zaimiene's performs marketing campaigns on consumer perceptions of its electronic offerings. This method entails the examination of sentiments expressed in customer feedback and discussions across social media platforms following the company's latest marketing endeavors. By determining the prevailing sentiment—be it positive, negative, or neutral—Zaimiene can evaluate the resonance of its campaigns with consumers. Predominantly positive sentiments suggest that the marketing strategies have been well-received, potentially enhancing the public image of Zaimiene's products. Conversely, negative sentiments may signal areas requiring improvement or issues warranting attention. The insights gleaned from sentiment analysis are invaluable for Zaimiene to fine-tune its marketing approaches, bolster customer satisfaction, and remain agile in the ever-evolving consumer perception landscape within the electronics market.</p> <p>The analysis of customer engagement metrics, such as likes and comments, is crucial for understanding consumer interactions with Zaimiene's products. A substantial number of likes on a social media post regarding a new product launch indicates a positive consumer response and potential advocacy. Conversely, an influx of comments offers a direct channel for consumer feedback, enabling Zaimiene to pinpoint elements that resonate well or identify areas needing enhancement. Monitoring these metrics over time allows Zaimiene to discern trends, assess the impact of marketing initiatives, and adapt strategies to foster greater consumer engagement. Ultimately, these metrics act as a real-time barometer of consumer sentiment, preferences, and satisfaction, providing essential insights that inform strategic decision-making and reinforce a consumer-oriented approach. These metics help the Zaimiene in wide coverage of market.</p> <p>Questions:</p> <p>Q. 5: (A).</p> <ol style="list-style-type: none"> 1. What insights can be gained by conducting a comparative analysis of topic trends and sentiments with Zaimiene's competitors on social media? 2. How can Zaimiene leverage sentiment analysis to assess the impact of recent marketing campaigns on customer perceptions of its electronic products? <p>Q. 5: (B).</p> <ol style="list-style-type: none"> 1. What is the primary goal of conducting sentiment analysis on customer feedback for Zaimiene's electronic products on social media? 2. Explain the importance of evaluating customer engagement metrics, such as likes and comments, in understanding customer interactions with Zaimiene's products. 	CO4	L5

Kindly fill the total marks allocated to each CO's in the table below:

COs	Marks Allocated
CO1	5 Marks
CO2	7 Marks
CO3	14 Marks
CO4	14 Marks

(Please ensure the conformity of the CO wise marks allocation as per your TLEP.)

Blooms Taxonomy Levels given below for your ready reference:

L1= Remembering

L2= Understanding

L3= Apply

L4= Analyze

L5= Evaluate

L6= Create