

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VII CS&BS : WINTER: 2025
SUBJECT: ADVANCED SOCIAL, TEXT & MEDIA ANALYTICS

Day : Tuesday
Date : 23/12/2025

W-24204-2025

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat diagrams **WHEREVER** necessary.

- Q.1** Explain the core operations involved in a text mining pipeline. Illustrate each operation with an example from social media or the Semantic Web domain. (10)
- OR**
- Q.1** Define Text Mining. Discuss its importance in the era of Web Mining and Social Network Analysis, citing relevant challenges and benefits. (10)
- Q.2** What is Content Analysis? Describe its methodology and explain how it is used for analysing social media and web content. Give suitable examples. (10)
- OR**
- Q.2** Explain Natural Language Processing (NLP) techniques commonly used in text and web mining. How does NLP contribute to the Semantic Web vision. (10)
- Q.3** Compare Manual and Automatic Keyword Extraction techniques. What are the advantages of automatic methods like RAKE in web mining and social network applications? (10)
- OR**
- Q.3** Describe the impact of Stop Lists on Keyword Extraction. How can the improper generation of stop lists affect the quality of extracted keywords? (10)
- Q.4** Explain the role of Web Analytics tools in understanding user behaviour. Discuss how data collected through analytics tools can be used to optimize website performance. (10)
- OR**
- Q.4** What is Clickstream Analysis? Describe its process and explain how businesses use clickstream data to improve user experience and conversion rates. (10)
- Q.5** What is Information Visualization in Social Network Analysis? Explain the role of visualization tools in identifying patterns and anomalies in large social graphs. (10)
- OR**
- Q.5** What is Social Network Analysis (SNA)? Discuss the steps involved in conducting SNA and explain its applications in web mining and business intelligence. (10)
- Q.6** Describe the methods for Temporal Analysis on Semantic Graphs. How does Three-Way Tensor Decomposition assist in uncovering the temporal dynamics of web communities? (10)
- OR**
- Q.6** Discuss the importance of studying the evolution of web communities. How does community evolution analysis help in better understanding online social behaviour? (10)
