

GUJARAT TECHNOLOGICAL UNIVERSITY
BACHELOR OF ENGINEERING – SEMESTER 6 – EXAMINATION – SUMMER 2026

Subject Code: 3164304

Date: 01/06/2026

Subject Name: Social Media Analytics

Time: 10:30 AM TO 01:00 PM

Total Marks: 70

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. Simple and non-programmable scientific calculators are allowed.**

- Q.1**
- (a) What is SMA? Discuss the objectives of SMA in organizational decision-making. **03**
 - (b) Explain how adjacency matrices help in analyzing social networks. Give example for same. **04**
 - (c) A company wants to track user engagement on social media. Which SMA techniques and graph methods can they use? Explain it. **07**
- Q.2**
- (a) Explain clickstream analysis with suitable example. **03**
 - (b) How does the growth of short-form video platforms (e.g., TikTok, Instagram Reels) change the way businesses approach Social Media Analytics? **04**
 - (c) In what ways has the rise of AI-driven content (chatbots, recommendation engines) influenced the evolution of SMA tools? Explain in detail. **07**
- OR
- Q.2**
- (c) Explain how network analysis can help a brand identify influencers across Facebook and Instagram. Give example for same. **07**
- Q.3**
- (a) What are the key metrics used to evaluate the results of an A/B test? **03**
 - (b) Explain how web crawling supports social media analytics in gathering large-scale user-generated content. **04**
 - (c) Explain in detail methods and tools available for measuring and analyzing social campaigns on Facebook. **07**
- OR
- Q.3**
- (a) Define Facebook Analytics and explain its significance for businesses. **03**
 - (b) What is the difference between static indexing and dynamic indexing in web data? Explain it with examples. **04**
 - (c) What are the key parameters in Facebook Analytics? Explain with examples. **07**
- Q.4**
- (a) How can NLP techniques be used to detect trending topics on Twitter? **03**
 - (b) Define sentiment analysis and give its importance in social media monitoring. **04**
 - (c) Explain how advancements in AI and NLP are transforming SMA tools and methods. **07**
- OR
- Q.4**
- (a) Discuss the limitations and pitfalls of A/B testing in social media campaign optimization. **03**
 - (b) How is SMA used in crisis management and disaster response? Explain it in detail. **04**

	(c) Describe how Google Analytics supports tracking user acquisition and retention. Give example for it.	07
Q.5	(a) How does Google Analytics integrate with social media platforms to provide a holistic view of marketing effectiveness?	03
	(b) Discuss the role of data privacy regulations (like GDPR) in shaping the tools and approaches used in SMA.	04
	(c) How is Unity used to collect and analyze in-game data? Explain how player retention and engagement can be measured using in-game analytics.	07
	OR	
Q.5	(a) Explain the role of BeautifulSoup and Scrapy in web crawling for social media analytics.	03
	(b) What limitations exist when using PyCharm for large-scale analytics workflows? Explain it in detail.	04
	(c) How can Python libraries like Matplotlib, Seaborn, and NetworkX be used for data visualization? Explain in detail with example.	07
