Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations – MAY 2025

Date: 29-05-2025 **Time:** 09:30 am – 12:30 pm

School: SOCSE	**Program:** B. Tech (CSD)	
Course Code: CSE3039	**Course Name:** Social Media Analytics	
Semester: VI	**Max Marks**: 100	**Weightage**: 50%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	26	26	24	24	

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks. **10Q x 2M=20M**

1.	Differentiate Public and Private data.	**2 Marks**	**L1**	**CO1**
2.	List any two social media analytics Tools and applications.	**2 Marks**	**L1**	**CO1**
3.	Define Restful API.	**2 Marks**	**L1**	**CO1**
4.	Define Greedy Clustering.	**2 Marks**	**L1**	**CO2**
5.	Define keyword search.	**2 Marks**	**L1**	**CO2**
6.	What is Hierarchical clustering?	**2 Marks**	**L1**	**CO2**
7.	Differentiate Ego networks and Whole Networks.	**2 Marks**	**L1**	**CO3**
8.	What is Behavior Modeling?	**2 Marks**	**L1**	**CO3**
9.	Define Face book mining.	**2 Marks**	**L1**	**CO4**
10.	List the different types of authentications supported by twitter.	**2 Marks**	**L1**	**CO4**

Part B

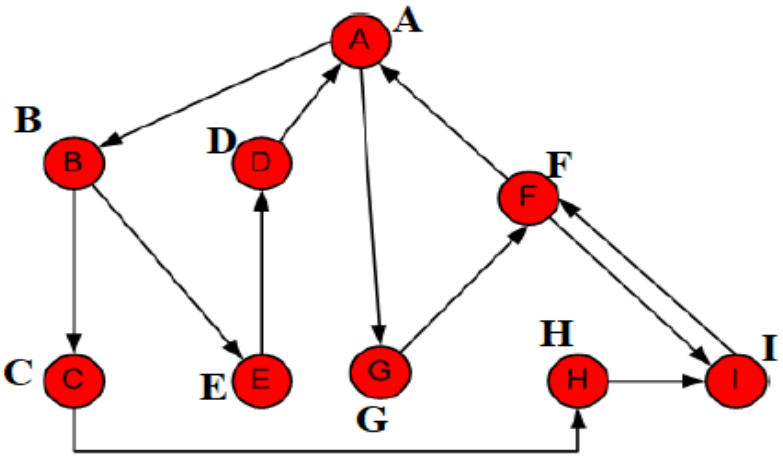
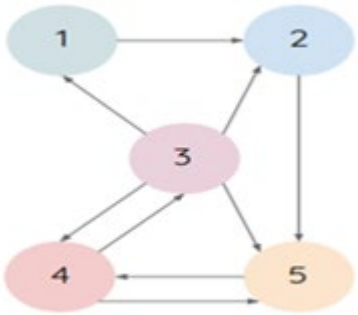
Answer the Questions. **Total Marks 80M**

11.	**a.**	Explain the different types of social media platform and its applications.	**10 Marks**	**L2**	**CO1**
	b.	Describe the different layers of social media data analytics.	10 Marks	**L2**	**CO1**
		Or			
12.	**a.**	Discuss the text cleaning process of social media data and develop the python code for cleaning the following Tweet Tweet "I'm really disappointed with the #iPhone14. It took them 1 years to change the screen & size. Let down."	**10 Marks**	**L2**	**CO1**
	b.	Explain the different types of social media API with its applications.	**10 Marks**	**L2**	**CO1**

13.	**a.**	Demonstrate the bag of words and vector space methods for text analytics and develop the python code for calculate the inverse document frequency of the following three documents: D1: Good boy D2: Good girl D3: boy girl Good	**15 Marks**	**L3**	**CO2**
	b.	Explain social media mining techniques with neat diagram.	5 Marks	**L2**	**CO2**
		Or			
14.	**a.**	Demonstrate the Naïve Bayes classifier. Apply the Naïve Bayes classifier for classification the following social media data	**15 Marks**	**L3**	**CO2**
	b.	Explain Keyword search with suitable algorithm.	**5 Marks**	**L2**	**CO2**

	Cat	Documents
Training	-	just plain boring
	-	entirely predictable and lacks energy
	-	no surprises and very few laughs
	+	very powerful
	+	the most fun film of the summer
Test	?	predictable with no fun

15.	**a.**	Discuss the different types of centralities of social media network and apply the closeness centrality method to calculate the Least and most central node of the following Graph.	**15 Marks**	**L3**	**CO3**

					
	b.	Explain the Jacquard similarity method with suitable example.	5 Marks	**L2**	**CO3**
		Or			
16.	**a.**	Explain the various application of Page ranking algorithm in social media data analytics and apply the python code to calculate the node rank of the following Graph. 	**15 Marks**	**L3**	**CO3**
	b.	Describe the individual Behavior Analysis of the social media users.	**5 Marks**	**L2**	**CO3**

17.	**a.**	Apply the step-by-step procedure for generating the access token of face book for developing the new application.	**15 Marks**	**L3**	**CO4**
	b.	Explain the procedure to Connects Graph API and Query for the Profile of the Authenticated social media User.	5 Marks	**L2**	**CO4**
		Or			
18.	**a.**	Discuss and Develop a Python program for customized sentiment analysis of the social media user. Explain each step, from loading the dataset to evaluating the model's performance with appropriate metrics.	**15 Marks**	**L3**	**CO4**
	b.	Describe the application of three different Face book APIs.	**5 Marks**	**L2**	**CO4**