**Vivekanand Education Society's Institute of Technology, Chembur, Mumbai,**
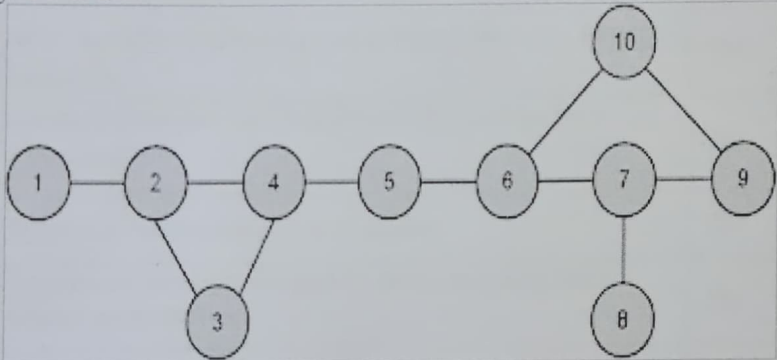**Department Of AI and DS**
**Year:2023-2024 (even sem)**
**Mid-Term Test**

| Class : D16 AD | Division: --- |
|---|---|
| Semester: VIII | Subject: Social Media Analytics |
| Date: 28 Feb 2024 | Time: 1 hr |

| Q.1) | | (Attempt any five of the following) | Marks (total 20) |
|---|---|---|---|
| | a) | Give 2 examples for Social media. Justify your choice with reasons | 2M |
| | b) | List any 2 types of social media with 2 examples for each | 2M |
| | c) | What do you understand by "diameter" of a social graph. Illustrate with an example | 2M |
| | d) | "Social network Visualization is a challenge". Justify this statement giving valid reasons | 2M |
| | e) | Define Egocentric networks. Illustrate the importance of such networks using 2 examples | 2M |
| | f) | Explain why text analytics in social media is a complex task. | 2M |

**Q.2)** Consider the following social graph. Answer Questions A or B given below.



| | | | | |
|---|---|---|---|---|
| a) | i. Represent the graph as adjacency matrix<br>ii. Compute Degree Centrality for all the nodes | | i. | 02 |
| | | | ii. | 03 |
| | **OR** | | | |
| b) | i. Represent the graph as adjacency list<br>ii. Compute Closeness Centrality for all the nodes | | i. | 02 |
| | | | ii. | 03 |

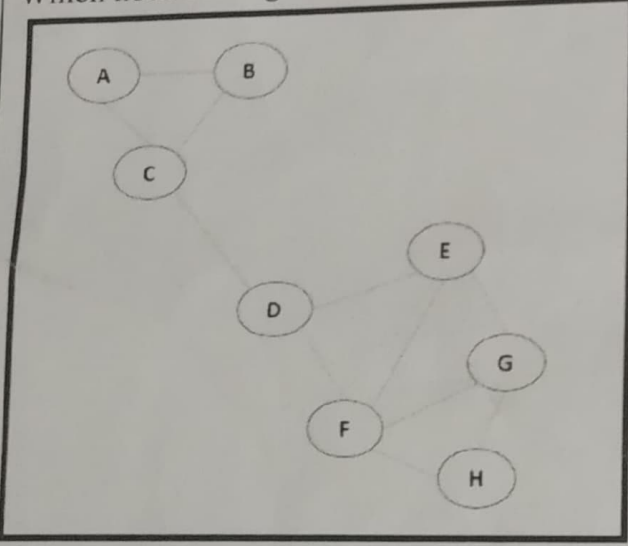| Q.3) | | For any one of the following applications, describe the steps of Social media text analytics process. Your solution will describe the following: Objective, Implementation and Results | |
|---|---|---|---|
| | a) | A political party wants to improve its chances of winning an election using text data from social media | 5 M |
| | **OR** | | |
| | b) | A Hotel chain wants to identify some new places to put up their hotels. They are interested in knowing preferences of customers, popular places activities etc from social media | 5 M |

Class : D17
Semester: VIII
Date: 28/02/2024

Division: A/B/C
Subject: SMA
Time: 10:30 am to 11:30 am

| CO | CO1 | CO2 | CO3 | |
|---|---|---|---|---|
| % | 30% | 35% | 35% | |

| | | | Marks (20) | COs Mapped |
|---|---|---|---|---|
| Q1 | | (Attempt any five of the following ) | | |
| | a) | How can an Insurance Company use social media analytics effectively? | 2M | CO1 |
| | b) | Compare social media hyperlink analytics with social media action analytics? | 2M | CO3 |
| | c) | Justify the significance of Tie strength and Trust for social media analysis ? | 2M | CO2 |
| | d) | How do likes, shares, and comments contribute to overall social media performance? | 2M | CO3 |
| | e) | State the problems and limitations of social media analytics? | 2M | CO1 |
| | f) | What is Hyperlink impact analysis ? | 2M | CO3 |
| Q2 | a) | Find out the closeness centrality of each node? Which node has highest closeness centrality?  | 5M | CO2 |

**OR**

| | | |
|---|---|---|
| b) | What are common types of social media networks and explain social network analytics tools? | 5M |
| a) | How does social media analytics differ from traditional business analytics, and explain the seven layers of social media analytics? | 5M |
| | **OR** | |
| b) | What are the different types of social media text, and explain the text analytics cycle? | 5M |

# Vivekanand Education Society's Institute of Technology

An Autonomous Institute Affiliated to University of Mumbai

## End Semester Examination
## Summer 2024

Max marks: 60
Branch: Computer Engineering
Name of the Course: Social Media Analytics
Course code: CSDC8023

Duration: 2 hours
Semester: VIII
QP Code: R23-CSDC8023_032023-24

**N.B.** (1) Attempt any three out of the five questions.
(2) Figures to the right indicate full marks.
(3) Assume suitable data if necessary.

| | | | Marks |
|---|---|---|---|
| Q.1 | (a) | Explain Social Media Alignment Matrix. | 5 |
| | (b) | Justify , giving suitable examples , significance of Tie Strength and Trust for Social Media Analytics. | 5 |
| | (c) | Write a short note on "Digital Marketing". | 5 |
| | (d) | Explain the Seven Layers of Social Media Analytics with suitable diagram | 5 |
| Q.2 | (a) | Demonstrate the sources of Location Data and the categories of Location Analytics. | 10 |
| | (b) | Explain the different type of Social Media text and the Text Analytics Cycle with a neat diagram. | 10 |
| Q.3 | (a) | Explain the two main categories of Search Engine Analytics. | 10 |
| | (b) | Demonstrate the common Social Media Network Types and explain the node level properties. | 10 |
| Q.4 | (a) | Differentiate between Traditional and Social Recommendation Systems. | 10 |
| | (b) | Discuss the Core Characteristics of Social Media. State the problems and limitations of Social Media Analytics. | 10 |
| Q.5 | (a) | Define Social Media Actions Analytics. What are the common Social Media Actions ? What are the Social Media Actions Analytics Tools ? | 10 |
| | (b) | Describe the privacy issues and policies in Social Media ? Explain how to maintain privacy online ? | 10 |

X------X------X-----X