13 DEC 2024

RAMRAO ADIK INSTITUTE OF TECHNOLOGY, NERUL

(D Y Patil Deemed to be University)

Program:Computer Engineering
End Semester Examination: B.Tech. Semester VI
Course Code: CEMDC601Course Name: Social Network Analysis (SNA)
Time: 2 hours
Max. Marks: 60

Instructions: 1. All three questions are compulsory

Que. No.	Question	Max. Marks	CO	BT
Q1	Solve any **Four**			
i)	Brief some main challenges to social media analytics?	5	CO1	BT3
ii)	With the help of examples illustrate what is degree distribution and density with respect to social networks.	5	CO2	BT4
iii)	What is hyperlink environment analysis?	5	CO3	BT3
iv)	Elaborate the main applications of social media data-driven location analytics?	5	CO4	BT6
v)	What is automated recommendation system, illustrate with the help of an example.	5	CO5	BT4
vi)	Discuss the limitations of social media analytics.	5	CO6	BT4

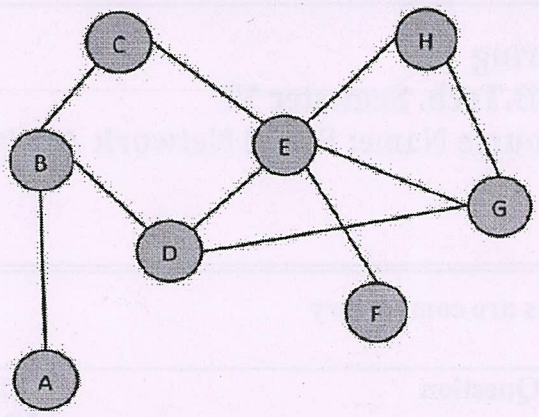
Que. No.	Question	Max. Marks	CO	BT
Q2 A	Solve any **Two**			
i)	With the help of example illustrate what is Hub, Router, Bridges and Sub networks.	5	CO2	BT4
ii)	Elaborate in detail the sources of location data. Any three.	5	CO4	BT6
iii)	Briefly comment on all social media actions.	5	CO3	BT3
iv)	Explain three levels of Social Network Analysis.	5	CO1	BT3
Q 2 B	Solve any **One**			
i)	Briefly explain the seven layers of social media data. Support your answer with examples.	10	CO1	BT5
ii)	Answer the following questions about this graph. a. Create an adjacency list for this graph. b. Create an adjacency matrix for this graph c. What is the length of the shortest path from node A to node F? d. What is the largest clique in this network? e. Draw the 1.5 ego network for node E. Are there any hubs in the network? If so, which node(s) and why is it a hub?	10	CO2	BT6

D Y PATIL UNIVERSITY
RAMRAO ADIK INSTITUTE OF TECHNOLOGY NAVI MUMBAI

13 DEC 2024

RAMRAO ADIK INSTITUTE OF TECHNOLOGY, NERUL

(D Y Patil Deemed to be University)



Que. No.	Question	Max. Marks	CO	BT
Q3	Solve any **Two**			
i)	Briefly list and define different actions performed by social media users.	10	CO3	BT4
ii)	Discuss the impact of social media on the public sector.	10	CO6	BT5
iii)	Explain steps needed to formulate a social media strategy.	10	CO5	BT3

==========

Course Outcomes (CO) -Learner will be able to:

CO1: Understand the concept of Social network

CO2. Understand the concept of social network Analytics and its significance.

CO3. Learners will be able to analyse the effectiveness of social media.

CO4. Learners will be able to use different Social network analytics tools effectively and efficiently

CO5. Learners will be able to use different effective Visualization techniques to represent social network analytics

CO6. Acquire the fundamental perspectives and hands-on skills needed to work with social media data.

BT1- Remembering, BT2- Understanding, BT3- Applying, BT4- Analyzing, BT5- Evaluating, BT6- Creating