

QP CODE: 22001007



Reg No : .....

Name : .....

**M Sc DEGREE (CSS) EXAMINATION, APRIL 2022**

**Third Semester**

Faculty of Science

M Sc COMPUTER SCIENCE ( DATA ANALYTICS)

**Elective - CA860301 - SOCIAL MEDIA MINING**

2019 ADMISSION ONWARDS

A9E3A2C3

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight **1** each.*

1. What is a graph in social media?How is it represented?Illustrate.
2. Write short note on a)complete graph b) Planar graph c)Regular graph d)bridges.
3. Explain vector space model.
4. How can we evaluate supervised learning algorithm?
5. What are the types of information diffusion?
6. Define the term epidemics, Susceptible,infected and recovered.
7. Which are the methods used for measuring influence?
8. Define the goal of a recommendation system.
9. Differentiate between hitting time and commute time.
10. Differentiate site migration and attention migration?

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight **2** each.*

11. Briefly Explain characteristics of Social Media.
12. Explain Minimum Spanning Tree algorithms.
13. Discuss about clustering algorithms in unsupervised learning.
14. Write short note on balanced communities.





15. Describe evaluation of community in network briefly.
16. Explain the method of homophily modelling.
17. Explain in detail about collaborative filtering recommendation algorithms.
18. Explain the methodology used for analysis of community-joining behavior.

(6×2=12 weightage)

### **Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Explain about three principal network models in social Media Mining.
20. Describe data quality ,features and preproceesing in detail.
21. Describe how networks are evolved?explain community detection in evolving networks.
22. Explain the methods used for distinguishing Influence and Homophily.

(2×5=10 weightage)

