

Exam.Code:1006  
Sub. Code: 7369

2063  
M.E. (Information Technology)  
Second Semester  
MEIT-2108: Social Network Analysis

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a. What is *Sociaogram*?
- b. Define *multiplicity* of a line? For what purpose it is used?
- c. Write short note on "Node Classification in Social Networks".
- d. Define *Personalized Pagerank*. Why and how it can be used.
- e. What is the use of *Dictionary* in Sentiment Analysis?

(5x2)

**UNIT - I**

- II. a. How can be a matrix used to represent data? Discuss with the help of suitable example. [5]
- b. What is **Inclusiveness**? What is its relevance in graph theory? [5]
- III. a. Compare Local and Global Centrality with the help of suitable example. [5]
- b. Discuss the concept of graph reduction with the help of a suitable example. [5]
- IV. Discuss any one Clustering algorithm in detail. Design a suitable data set yourself and implement the clustering algorithm on it. [10]

**UNIT - II**

- V. a. Discuss various methods to handle missing and noisy data with the help of suitable example. [5]
- b. What is Sampling? How sampling can affect data analysis?  
Explain with the help of suitable example. [5]
- VII. Elaborate RandomWalk based Proximity Measures in detail. [10]
- VII. Explain the relevance of opinion mining in various domain in detail. How Opinion Mining can be performed. Is it useful in Business Intelligence and Elections? Justify your answer. [10]

x-x-x