

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATIONS- 2026

M.Tech-II Semester (CSE/IT)

COURSE CODE (CREDITS): 22MI WCI234

MAX. MARKS: 35

COURSE NAME: Social and Information Network Analysis

COURSE INSTRUCTOR: Dr. Amit Kumar

MAX. TIME: 2 Hour

*Note: (a) All questions are compulsory.**(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems**(c) Use of calculator is not allowed*

Q.No	Question	CO	Marks
Q1	a) Describe the concept of meta measure (MM) and individual measure (IM). How MM combines the IM.	4	5
	b) Write down the Application of MM.		2
Q2	a) What is Information cascading with its types and how it works in the social networks?	4	5
	b) Mention the possible applications and the engineering implications of the information cascading.		2
Q3	Suppose we want to find out the closeness between two nodes then mention the three measures to complete the task with an suitable example.	5	7
Q4	a) To prioritize the specific page the "PageRank" concept is usually used to complete the task. Mention the limitations of the standard pageranking algorithm and mention the concept of rooted pagerank algorithms with the formula and an example.	5	5
	b) Compare the rooted pagerank with the other proximity measures.		2
Q5	a) Describe the concept of epidemic modeling with its types along with it applications.	5	5
	b) Also mention the importance of SIR and SEIR model with suitable diagram.		2