Reg No.: 0720MCA289112401

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Third Semester MCA (Two Year) Degree (R,S) Examination December 2024

Course Code: 20MCA289

Course Name: SOCIAL NETWORK ANALYSIS

Max. Marks: 60 Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks. Marks

1	Define the development of the semantic web.	(3)
2	What is social network analysis?	(3)
3	Describe electronic discussion networks.	(3)
4	Compare Unified Modelling Language (UML) with Ontological languages.	(3)
5	What is meant by evaluating smushing?	(3)
6	Describe the FOAF Ontology.	(3)
7	Define power law.	(3)
8	Explain Strongly connected components with an example.	(3)
9	What are the basic functions of the storage repository of a search engine?	(3)
10	Write a note on web spam pages.	(3)

PART B

Answer any one question from each module. Each question carries 6 marks.

Module I

11	Summarize the concept of semantic web and its solutions.	(6)

OR

12	Explain the global structure of networks.	(6)

Module II

13	Discuss about electronic sources for network analysis.	(6)

OR

14	Describe the features of Resource Description Framework (RDF).	(6)

(6)

Module III

Discuss the ontological representation of social relationships. (6)

OR

Discuss the ontological representation of social individuals. (6)

Module IV

Differentiate the strongly connected components (SCC) algorithm from the weakly connected components (WCC) algorithm, and include examples to illustrate the differences. (6)

OR

Summarize the limitations of HyperANF Algorithm and explain how it can be sorted out using the Iterative Fringe Upper Bound(iFUB) Algorithm (6)

Module V

Explain the architecture of a search engine with a neat diagram and comment on each of its components. (6)

OR

Compare the HITS Algorithm and the Page Rank Algorithm (6)

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