Reg No.:_____ Name:_____

0520MCA289122101

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Third Semester MCA (2 Year) Degree Examination December 2021

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	What is meant by semantic web?	(3)
2	Write a note on Personal network	(3)
3	List down and briefly explain electronic sources for network analysis	(3)
4	Compare RDF and OWL with the Entity/Relationship (E/R)	(3)
5	Define Friend-of-a-Friend (FOAF) ontology	(3)
6	Explain how the reasoning with instance equality is done in social network data	(3)
7	What is meant by Degree Assortativity? What is the use of this measure?	(3)
8	What is “Spid”? How it is used to differentiate between web-network and social network?	(3)
9	What are the data structures used in Google search engine	(3)
10	What is Web Spam Pages	(3)

PART B

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

Module I

11	Explain the global structure of networks	(6)
	OR	
12	What is the macro-structure of social networks	(6)

Module II

13	What is meant by ontology-based knowledge representation? Explain its Role in the semantic web.	(6)
	OR	
14	Describe the characteristics of Resource Description Framework (RDF).	(6)

Module III

15	How is aggregating and reasoning done with social network data?	(6)
	OR	
16	Describe Ontological representation of social relationships.	(6)

Module IV

17	Write the limitations of HyperANF Algorithm and explain how it can be sorted out using the Iterative Fringe Upper Bound (iFUB) Algorithm.	(6)
	OR	
18	Define the following with suitable example: a) Rank exponent b) Hop plot exponent c) Eigen exponent	(6)

Module V

19	Describe storage and indexing in Search Engines	(6)
	OR	
20	Compare the HITS Algorithm and the Page Rank Algorithm	(6)

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