



QP CODE: 26802598



Reg No :

Name :

IMCA DEGREE EXAMINATION JUNE 2026

Eight Semester

INTEGRATED MCA

ELECTIVE - IMCA8E03A - SOCIAL NETWORK ANALYSIS

2020 Admission Onwards

9B8E97F1

Time: 3 Hours

Maximum: 75 Marks

Part A

*Answer any **ten** questions*

Each question carries 3 marks

1. Differentiate the web 1.0 and web 2.0.
2. Discuss the importance of blogs and online communities.
3. Explain applications of social network analysis in Social Media and E-Commerce.
4. Explain XML schema with example.
5. Explain element.
6. Compare RDF and OWL.
7. Explain how you evaluate the community based on modularity score with examples.
8. Discuss why a k-club be considered more flexible than a clique for community detection.
9. Explain the primary motivations behind profile cloning.
10. Explain ballot stuffing and defamation.
11. Differentiate betweenness and closeness with example.
12. Define an adjacency matrix and explain how it represents the structure of a graph.
(10×3=30 marks)

Part B

*Answer **all** questions*

Each question carries 9 marks

13. a) Discuss the concept of semantic web and how it is different from the current web.

OR





- b) Explain
 - a) application of SNA in healthcare b) application of SNA in web and cybercrimes
 - c) Social media and E-commerce.

14. a) Differentiate RDF and OWL. Why RDF is needed over OWL.

OR

- b) Describe ontology web language(OWL)

15. a) Explain community detection in Social Network Analysis (SNA). Why is community detection important in the study of social networks?

OR

- b) Briefly explain modularity based community detection methods.

16. a) Identify and briefly describe different types of attacks that can be launched on social networks.

OR

- b) Explain
 - a) Comment ballot stuffing on social networks affect the credibility of online polls or votes.
 - b) How is defamation defined within the context of social networks?

17. a) Define the measures farness and closeness centrality. Explain how this measures are used in Social network analysis. Explain with example.

OR

- b) Explain the graph visualization tools for social network analysis. Explain any three types of graph visualization approaches.

(5×9=45 marks)

