This question paper consists of TWO (2) sections. Answer ALL questions in the answer booklet provided. [100 MARKS]

SECTION A (20 Marks)

There are TEN (10) questions in this part. Answer ALL questions in the answer booklet.

1. What is Social Network Analysis?

   A. Predicting stock market trends
   B. Analysing and visualising social relationships
   C. Monitoring private messages
   D. Creating online advertisements

2. Which metric in social network analysis measures the number of direct connections a node has?

   A. Betweenness centrality
   B. Degree centrality
   C. Closeness centrality
   D. Eigenvalue centrality

3. What is the diameter of a graph?

   A. Is a way to quantitatively analyze a graph
   B. Graph width
   C. The largest number of vertices to be traversed in order to travel from one vertex to the other
   D. All of the above

4. What are the Measures of Centrality?

   A. Closeness & Eigenvector
   B. Degree & Betweenness
   C. None
   D. Both

5. _____ is a connection between two nodes.

   A. Edge
   B. Degree
   C. Neighbourhood
   D. None

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6. What does the term 'nodes' refer to in Social Network Analysis?

    A. The individual messages sent within the network
    B. The software used for network analysis
    C. Individuals or entities within the network
    D. The internet connection points

7. Which of these is a measure of how important a node is within a network in SNA?

    A. Data volume
    B. Centrality
    C. Frequency
    D. Density

8. In SNA, what is 'betweenness centrality' used to measure?

    A. The amount of data passing through a node
    B. A node's position as a bridge within the network
    C. The frequency of communication between nodes
    D. The physical distance between nodes

9. This relates to the study of groups are connected and affect one another.

    A. Social networks
    B. Clinical psychology networks
    C. Dynamic networks
    D. Behavioural networks

10. What does 'modularity' measure in Social Network Analysis?

    A. The strength of the internet connection
    B. The capacity of data storage
    C. The structure of network clusters or communities
    D. The user interface design of analysis software

SECTION B (80 Marks)

There are FIVE (5) questions in this section. Answer ALL questions.

1. Personal social network analysis (SNA).

   a) Describe your own social network on LinkedIn and/or Facebook in 50 words.
   b) Share about the connections and impact from the different types of connections.
   c) How would you interpret the network's role and effectiveness for your professional career growth?
   d) What is your strategy to grow your own personal social network? What tactics will you implement?

   (20 marks)

2. Discuss the role of centrality measures in Social Network Analysis and their importance in understanding network structures.

   (10 marks)

3. Evaluate the use of Social Network Analysis in digital marketing. How can SNA provide insights into consumer behavior and market trends?

   (20 marks)

4. Analyze the role of SNA in public health, specifically in tracking and managing the spread of infectious diseases.

   (20 marks)

5. How does Social Network Analysis assist in understanding organizational structures and employee relationships?

   (10 marks)

*** END OF QUESTION PAPER ***