

SOCIAL NETWORK ANALYTICS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

- 1 _____ web is a mesh of data that are associated in such a way that they can be easily be processed by machines instead of human operators.
(i) World Wide (ii) Semantic
(iii) Non Semantic (iv) Technological
- 2 The expansion of RDF is
(i) Random description flame (ii) Random description frame
(iii) Resource description flame (iv) Resource description frame
- 3 _____ is a tool for developing ontology.
(i) DIME (ii) DOME
(iii) CIME (iv) CEON
- 4 _____ is a mobile app that allows users to send and receive self destructing photos and videos.
(i) Twitter (ii) Linked In
(iii) Instagram (iv) Snap chat
- 5 Component size is counted by the number of _____ connected in the graph.
(i) Nodes (ii) Edges
(iii) Weights (iv) Paths
- 6 The other name for clustering is _____.
(i) Closeness (ii) Community
(iii) Centrality (iv) Path length
- 7 The principle for Matlink is to augement a standard matrix representation with links on its _____.
(i) Graph (ii) Edges
(iii) Borders (iv) Nodes
- 8 The principle of node link diagram is to graphically represent _____ of the network by node and connection by links.
(i) Messages (ii) Social media
(iii) Actors (iv) Nodes
- 9 _____ algorithm is most commonly used in all data analytical tools.
(i) KP (ii) LN
(iii) KL (iv) GM
- 10 _____ evaluation is graph based and interaction based.
(i) Ontology (ii) Hybrid
(iii) Closeness (iv) Trust

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a Describe the limitations of the current web.
OR
b What are the various recent developments in social network analysis?
- 12 a Describe web based networks as an electronic source.
OR
b Describe ontology – based knowledge representation.
- 13 a Explain any two methods for community detection.
OR
b What are the challenges faced by DOSNs?
- 14 a Brief about the role of user data management in predicting human behaviour.
OR
b How to manage the trust for social network in an online environment?
- 15 a Explain the role of clustering coefficient in exploring the grouping effects.
OR
b Explain the various applications of social network analytics.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a Explain the emergence of social web. Differentiate web 2.0 from web 3.0.
OR
b Explain the key concepts and measures in network analysis.
- 17 a Elucidate aggregating and reasoning with social network data.
OR
b Compare ER model from relationship model.
- 18 a Exemplify the process of evaluating communities.
OR
b Explain the tools for detecting communities.
- 19 a Exemplify how technology helps to enable new experience among the social communities.
OR
b How trust transitivity analysis helps in improving trust and belief among the customers?
- 20 a Exemplify node-edge diagrams for visualization of social networks.
OR
b Explain the two types of visualizing social networks with matrix based representation.