Reg. No. :

Question Paper Code: 41882

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Elective

Information Technology

14UIT919 - SOCIAL NETWORK ANALYSIS

(Regulation 2014)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. The importance of semantic web is to make

    (a) Search content in the web
    (b) Fill knowledge gap between human and machine
    (c) To provide the information quicker
    (d) To identity the location of the content

2. Social network analysis is the study of

    (a) Study of relations among set of actors
    (b) Attributes of individual actors
    (c) Analyzing the particular relationship
    (d) Define the view on actors

3. The main challenge of the semantic web is

    (a) Representing the web content
    (b) To access the required web page exactly
    (c) To understand the information provided
    (d) to make ensure the shared interpretation of information

4. Ontologies are to

    (a) Form an information providing agent
    (b) Describe the web information

(c) make common understanding of structure of information

(d) Not to make the reuse of domain

5. Decentralized online social network is implemented on

(a) Providing semantics to the web

(b) Distributed information management platform

(c) Evolution of web community

(d) Defining web resource

6. Mutual awareness is to indicate the

(a) pair of bloggers are aware of each other

(b) relationship among information provided

(c) common sharing of information

(d) difference between the each blogger

7. Online trust and reputation system are important decision support tools for

(a) Providing trusted information

(b) Giving secure information and service

(c) Selecting online service and accessing risk of accessing it

(d) Filter the information provided

8. Online Social Network is a web based service that allows individuals to

(a) Construct a Public profile within the service

(b) Form a network for the users

(c) Communicate with each other user

(d) Provide secure exchange of data

9. Visualization is a technique which is used to explore

(a) Complete view of information provided

(b) Different types of user views on the information

(c) Finding the information what the user requires

(d) the social relationship within social networks

10. Clustering coefficient is to measure the

(a) Degree of nodes in a graph to be clustered

(b) Number of nodes present in the graph

(c) Analyze the node to represent in the social network

(d) Connectivity between the nodes in the graph

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11. List out the limitations of the current web? Explain the solution can be made for it.

12. Define Resource description framework.

13. What is the necessary for detecting communities in the social networks?

14. Define trust models based on subjective logic?

15. What is graph theory and list its terms?

PART - C (5 x 16 = 80 Marks)

16. (a) (i) Define semantic web. Explain in detail about the development of semantic web. (8)

    (ii) Briefly explain about Web-Based networks. (8)

Or

    (b) Define social network analysis? Explain the key concepts and measures in the network analysis. (16)

17. (a) (i) What is meant by ontology? Explain about its knowledge representation. (8)

    (ii) Briefly explain about the ontology languages for Semantic Web. (8)

Or

    (b) Explain with necessary examples ontological representation of social individuals and its social relationships. (16)

18. (a) Define Community. Explain in brief about Methods for community detection. (16)

Or

    (b) (i) Explain briefly about the extracting communities based on mutual awareness structure. (10)

    (ii) Explain in detail about the challenges of decentralized online social networks. (6)

19. (a) What is meant by Trust in online Environment? Explain about Trust based on subjective logic. (16)

Or

(b) (i) What is meant by trust transitivity analysis and explain it briefly. (8)

   (ii) Explain the Trust derivation based on trust comparisons with its appropriate measures. (8)

20. (a) (i) What is meant by Visualization? Explain about the graph theory and centrality. (8)

   (ii) Define Node-Edge Diagrams and explain its kinds. (8)

Or

(b) Explain the different categories of applications of social network analysis. (16)

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