

B.Tech IV Year II Semester (R13) Advanced Supplementary Examinations July 2017

SOCIAL NETWORK ANALYSIS

(Information Technology)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What are the 4 layers which are important to make semantic web real?
 - (b) What is social network analysis?
 - (c) Enlist the characteristics of social relationships.
 - (d) Illustrate two kinds of extensions that RDF schema makes over RDF.
 - (e) Explain vertex similarity.
 - (f) Explain quality function: modularity.
 - (g) What is context awareness?
 - (h) What constitutes trust network analysis?
 - (i) Explain co-citation networks.
 - (j) Define augmenting matrices.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Briefly explain the electronic sources for network analysis.

OR

- 3 Elaborate on how semantic web reduce the knowledge gap between human and machine.

UNIT – II

- 4 Define ontology and list its features. Explain in detail the role of ontology in semantic web.

OR

- 5 Explain the basic elements of OWL in detail.

UNIT – III

- 6 Define community. Why community detection is important? Explain in detail about various methods for community detection.

OR

- 7 Elaborate on various challenges for decentralized online social networks.

UNIT – IV

- 8 Explain in detail with a diagram the human behavior understanding and prediction process.

OR

- 9 What is trust transitivity analysis? Explain in detail uncertainty favoring trust transitivity and base rate sensitive transitivity with example.

UNIT – V

- 10 What is visualization? What is its purpose? Explain the visual representation employed in visualizing social networks.

OR

- 11 Elaborate on online social network visualizations based on different views of social relationships.
