

Code No: 118EQ**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year II Semester Examinations, June - 2018****SEMANTIC WEB AND SOCIAL NETWORKS****(Computer Science and Engineering)****Time: 3 hours****Max. Marks: 75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A**(25 Marks)**

- 1.a) What is artificial intelligence? [2]
- b) What is solvable on the Web? [3]
- c) Explain about HTML language. [2]
- d) Give an overview of Web ontology language. [3]
- e) What is e-learning? Explain. [2]
- f) Explain about monotonic and nonmonotonic rules. [3]
- g) What is degree centrality? [2]
- h) Discuss about Swoogle. [3]
- i) Define Jaccard-coefficient. [2]
- j) Explain about Sesame. [3]

PART - B**(50 Marks)**

- 2.a) Explain how HTML limits the manipulation of information.
- b) Discuss about the information age. [5+5]

OR

- 3.a) Discuss how the number of nodes on the Web creates computational complexity that limits the ability to develop logic proof systems.
- b) Describe the semantic Web road map. [5+5]

- 4.a) Explain basic elements of RDF language.
- b) Give examples of ontology and OWL. [5+5]

OR

- 5.a) Discuss about ontology methods, matching and mapping.
- b) Explain sharing and merging. [5+5]

- 6.a) Describe logic and inference.
- b) Discuss about semantic Web applications and Web services. [5+5]

OR

- 7.a) Explain about inference engines.
- b) Discuss about enterprise application integration. [5+5]

8.a) Explain about latent semantic index search.

b) What is social network analysis? Explain.

[5+5]

OR

9.a) Discuss about semantic search technology.

b) What are personal networks? Explain.

[5+5]

10. Explain in detail about building Semantic Web applications with social network features.

[10]

OR

11. Explain in detail about Web-based networks.

[10]

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