

**R15**

Code No: 128EQ

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, July - 2019

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) Why intelligent ubiquitous devices improve productivity? [2]
- b) Explain about the WWW. [3]
- c) Describe ontology sharing and merging. [2]
- d) What are unique features of UML? [3]
- e) Explain about semantic Web services. [2]
- f) Explain about Monotonic and Nonmonotonic Rules. [3]
- g) Describe electronic discussion networks. [2]
- h) What is network analysis? Explain. [3]
- i) Define Sesame Repository. [2]
- j) Explain about GraphUtil. [3]

**PART - B**

(50 Marks)

- 2.a) Discuss how the number of nodes on the Web creates computational complexity that limits the ability to develop logic proof systems.
  - b) Explain about artificial intelligence and machine intelligence. [5+5]
- OR**
- 3.a) Discuss about the logic on the semantic Web.
  - b) What are limitations of semantic Web? Describe the next generation Web. [5+5]
4. Explain in detail about RDF and RDF schema. [10]
- OR**
- 5.a) Discuss about ontology engineering in detail.
  - b) What is OWL? Explain in detail. [5+5]
- 6.a) Discuss in detail about RDF inference engine.
  - b) What are semantic Web applications? Explain. [5+5]
- OR**
- 7.a) Explain in detail about inference engines.
  - b) Describe semantic search and e-learning. [5+5]

- 8.a) What are semantic methods? Explain. [5+5]  
b) What's wrong with the Web? Explain.

OR

- 9.a) Discuss about technology adoption in detail. [5+5]  
b) Explain in detail about semantic search technology.

10. Explain in detail about Web based networks. [10]

OR

11. Explain the following: [5+5]  
a) Blogs  
b) Online communities.

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