R15

Code No: 825AG

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA V Semester Examinations, January - 2018
SEMANTIC WEB AND SOCIAL NETWORKS

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

5×5 Marks = 25

1.a) What are the basic limitations of today's Web?   [5]
  b) Is XML a replacement or complimentary technology for HTML? Justify your answer. [5]
  c) Present the elements of a simple RDF inference engine.   [5]
  d) What type of knowledge is provided by service grounding?   [5]
  e) What two features of web pages are considered for extracting social relations? Why? [5]

PART - B

5×10 Marks = 50

2.   How the Web contributes information services that benefit human productivity? Discuss suitable examples.   [10]

OR

3.   NP-complete problems are encountered frequently in artificial intelligence. Discuss them and what are the alternatives to address them.   [10]

4.a) Give illustrative examples for RDF Schema.
  b) Compare and contrast XML schema with RDF schema.   [5+5]

OR

5.   How to compare conceptual information across two knowledge bases on Web? Explain the process with illustrations.   [10]

6.   "Good empirical evidence of scalability–tractability for conceptual reasoning with description logic systems is necessary" Support or oppose this statement.   [10]

OR

7.   What is latent semantic indexing? How can this approach improve semantic search? Explain your answer.   [10]

8.   Describe the relationship between OWL-S and WSDL and SOAP.   [10]

OR

9.   What is a social network? What are the benefits of social network analysis? Discuss the basics in social network analysis.   [10]

10. Explain the role of blogs and online communities in predictive analytics- a kind of social network analysis.   [10]

OR

11. Does Sesame integrate reasoning into RDF triple store? Justify your answer with necessary discussions.   [10]