R17

Code No: 845AH

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA V Semester Examinations, December - 2019
SEMANTIC WEB AND SOCIAL NETWORKS

Time: 3hrs   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 limitations of today's web?   [5]
  b)   Illustrate the parts of an RDF document.   [5]
  c)   What are the tools used for ontology construction?   [5]
  d)   What functions are automated by the OWL-S?   [5]
  e)   How to compute the weight of a directed link between two persons in web-based networks?   [5]

PART - B

5 × 10 Marks = 50

2.   Which sub branches of machine intelligence have particular relevance to the semantic web? Discuss them in detail.   [10]

OR

3.   What are the major contributions of Berners-Lee to the Information revolution? Explain.   [10]

4.   Discuss the interpretation of multiple statements in relationship to RDF statements with suitable examples.   [10]

OR

5.   Explain characteristics of various types of web ontology language.   [10]

6.   Describe tree searching algorithms used in knowledge representation.   [10]

OR

7.   Explain how logic and rules are used on the semantic web to create inferences that manipulate and produce new knowledge.   [10]

8.   With suitable examples explain the three types of processes defined by OWL-S.   [10]

OR

9.   E-learning is leveraging technology experiencing rapid development. Explain the need of semantic methods for e-learning and any one method in detail.   [10]

10.   How to perform social network analysis? Explain the role of electronic sources for this analysis.   [10]

OR

11.   Discuss the advanced features provided by Elmo scutter to support FOAF profile collection.   [10]

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