

Code No: 815BK

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA V Semester Examinations, January - 2018****SYMANTIC WEB AND SOCIAL NETWORKS****Time: 3 Hours****Max. Marks: 60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

**PART - A****5 × 4 Marks = 20**

- 1.a) Briefly explain about the information age. [4]
- b) Explain about XQuery. [4]
- c) Discuss about descriptive logic. [4]
- d) Describe XML-based Web services. [4]
- e) Explain the generic architecture of semantic Web applications. [4]

**PART - B****5 × 8 Marks = 40**

- 2.a) Explain about the World Wide Web.
- b) Distinguish between artificial intelligence and machine intelligence. [4+4]

**OR**

- 3.a) Explain about inference engines.
- b) Describe computational complexity for large networks. [4+4]

- 4.a) Discuss about compatibility of OWL and RDF/RDFS.
- b) Explain about ontology mapping tools. [4+4]

**OR**

- 5.a) Describe constructing ontology.
- b) Explain about RDF language. [4+4]

- 6.a) Discuss about enterprise application integration.
- b) Explain about RDF inference engine. [4+4]

**OR**

- 7.a) Describe logic and inference.
- b) What are semantic Web applications? [4+4]

8. What is network analysis? Explain development of social network analysis. [8]

**OR**

9. Explain in detail about semantic search technology. [8]

10. Discuss about building semantic Web applications with social networks features. [8]

**OR**

11. Explain the following:
  - a) Elmo
  - b) Blogs and online communities. [4+4]

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