R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year II Semester Examinations, April - 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 machine intelligence?	[2]
b)	Explain in detail about ontology.	[3]
c)	Describe ontology libraries.	[2]
d)	Discuss about constructing ontology.	[3]
e)	What is descriptive logic?	[2]
f)	Explain about knowledge base.	[3]
g)	What is TAP?	[2]
h)	Explain about random graph model.	[3]
i)	What is snowballing technique?	[2]
j)	Explain about GraphUtil.	[3]

PART - B
(50 Marks)

2.a)   Discuss about logic on the semantic Web.
  b)   Explain about reasoning with semantic networks.   [5+5]

OR

3.a)   List the possible uses for small devices that may develop within the next 5 years.
  b)   Explain about the World Wide Web.   [5+5]

4.a)   Explain about ontology "Spot" example.
  b)   Describe compatibility of OWL and RDF/RDFS.   [5+5]

OR

5.a)   Discuss about ontology engineering and ontology development tools.
  b)   Briefly explain about ontology schema.   [5+5]

6.   Explain about semantic search semantic bioinformatics.   [10]

OR

7.   Explain in detail about logic, inference and rules.   [10]

8.a) Discuss about Web search agents.
  b) Explain about the global structure of networks. [5+5]

OR

9.a) What is a search engine? Explain about search engines.
  b) Describe development of social network analysis. [5+5]

10. Explain the following:
    a) The generic architecture of semantic Web applications
    b) Web-based networks. [5+5]

OR

11. Explain the following:
    a) Elmo
    b) Blogs and online communities. [5+5]

---ooOoo---