Code: 9A05804

1

B.Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

SEMANTIC WEB

(Computer Science and Engineering)

Time: 3 hours   Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
*****

1   Write about syntactic Web. Explain how semantic web works.

2   Difference about:
    (a) Taxonomies Versus Ontologies.
    (b) Thesauri Versus Ontologies.

3   Explain inference problems for concept descriptions.

4   Discuss about datatype and object properties and class descriptions.

5   Introduction rule languages. Explain usage scenarios for rule languages.

6   Discuss in detail about KACTUS project and lexicon-based ontology development method.

7   Write about:
    (a) OilED.
    (b) OntoEdit.
    (c) Protege Ontology Editor.
    (d) Protege Pulgins and APIs.

8   Write in detail metadata schemas for the description of works of Art.

*****

Code: 9A05804

2

B.Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

SEMANTIC WEB

(Computer Science and Engineering)

Time: 3 hours   Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
*****

1   What is syntactic web? Discuss in detail about semantic web.

2   Write about Classifying Ontologies According to:
- (a) Semantic spectrum.
- (b) Generality.
- (c) Information represented.

3   Explain inference problems for assertions.

4   Introduce OWL. Explain requirements for web Ontology description languages.

5   Write about:
- (a) Dtalog.
- (b) RuleML.
- (c) SWRL.
- (d) TRIPLE.

6   Introduce about ontology sources. What is metadata? Explain Dublin core and Warwick framework.

7   Write about reasonesrs. Explain about Dublin core metadata editor and protégé ontology editor.

8   Explain agent architecture. Write about software agent communication in the Semantic Web.

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3

B.Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

SEMANTIC WEB

(Computer Science and Engineering)

Time: 3 hours   Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
*****

1   Discuss in detail between syntactic web and semantic web.

2   Discuss in detail about web ontology description languages.

3   Introduce knowledge representation in description logic with an informal example.

4   Write about:
    (a) RDF statements and vocabularies.
    (b) RDF triples and graphs
    (c) RDF/XML.

5   Introduce about semantic web services and its essentials.

6   Write about Upper Ontologies. Explain SUMO, CYC and WordNet.

7   Introduce semantic web software tools. Write about Dublin core metadata editor and protégé ontology editor.

8   Discuss semantic desktop. Explain in detail explain semantic desktop related applications.

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4

B.Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

SEMANTIC WEB
(Computer Science and Engineering)

Time: 3 hours   Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
*****

1   Write about semantic web. Explain its working.

2   Define ontology. Explain the difference among taxonomies, thesauri, and ontologies.

3   Write in detail about family of attributive languages:
    (a)   Explain concept descriptions.
    (b)   Explain terminologies.

4   Introduce about RDF and RDF schema. Write about XML essentials.

5   Write in detail about OWL-S service ontology with its profile, model, and grounding.

6   Introduce methods for ontology development. Explain methods Uschold and king
         ontology and Toronto virtual enterprise.

7   Explain in detail about metadata and ontology editors.

8   Explain in detail ontologies for the description of works of Art.

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