

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VII Computer Science & Engineering : WINTER : 2024
SUBJECT: SEMANTIC WEB

Day : Monday
Date : 09/12/2024

W-25607-2024

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat diagrams **WHEREVER** necessary.

Q.1 What is differentiate between Current Web vs Semantic Web Technologies? (10)

OR

Q.1 What is web? Explain web technology in detail with example. (10)

Q.2 How can you evaluate the effectiveness and efficiency of sematic web? What criteria would you use to compare different algorithm in achieving optimal sematic web. (10)

OR

Q.2 Describe the impact and significance of language extensions in the sematic web for the enhancing. (10)

Q.3 Explain the structure and components of XML documents. How do these elements facilitate data organization, exchange and interoperability across diverse system? Explain in detail. (10)

OR

Q.3 Describe the Name spaces, Addressing and querying XML in detail. (10)

Q.4 Explain the relationship between concepts in web ontology using RDF at the application level. (10)

OR

Q.4 Describe the effectiveness of layering techniques in OWL ontology development to ensure logical consistency and scalability. (10)

Q.5 Explain the proficiency in constructing and interpreting graph patterns in SPAQL. (10)

OR

Q.5 Write a note on: Complex Graph patterns, Group patterns. (10)

Q.6 What are the key principles of linked data within the context of web semantics? How do the Contribute to the structured representation and inter connectivity of data an ontology? (10)

OR

Q.6 Explain the concept of the linked open data (LOD) cloud and its significance in fostering interoperability in detail. (10)

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