

BACHELOR OF TECHNOLOGY (CBCS) (2020 COURSE)
B.Tech.Sem - VII COMPUTER SCIENCE & ENGINEERING : SUMMER : 2024
SUBJECT: SEMANTIC WEB

Day : Tuesday
Date : 14/05/2024

S-24346-2024

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 How does the organization and retrieval of information on the semantic web differ (10)
from that to the traditional web? Explain the semantic web implications information
accessibility and usability in detail.

OR

Q.1 Draw and explain semantic architecture. Write advantages and challenges of (10)
semantic web.

Q.2 What criteria would you use to compare different algorithms in achieving optimal (10)
semantic web performing? Explain in detail.

OR

Q.2 Define the term of Reasoning Algorithms and Language extension. Explain in (10)
detail.

Q.3 Describe the extensions facilitate more effective communication and integration of (10)
diverse data set within semantic web environment.

OR

Q.3 What is XML Language? Describe XML structure and XML document in detail. (10)

Q.4 Explain in detail OWL Language and layering of OWL with any one example. (10)

OR

Q.4 Describe in detail RDF/ RDFs with example. (10)

Q.5 What is Simple Graph patterns? Explain in detail SPARQL with example. (10)

OR

Q.5 Define data values. Describe OWL formal semantic and Queries with data values in (10)
detail.

Q.6 Write a principles of Linked data. Define web of data? Explain LOC cloud in detail. (10)

OR

Q.6 What is LOD cloud? Explain in detail significance of fostering interoperability and (10)
accessibility of data across various domains on the web.

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