

**CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS**

**IV-B.TECH-I-Semester End Examinations (Regular) - November- 2024
SEMANTIC WEB & SOCIAL NETWORKS**

(IT)

[Time: 3 Hours]

[Max. Marks: 70]

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 10 marks and may have a, b, c as sub questions.

PART-A

(20 Marks)

1. a) Which organization developed open Web standards? [2M]
- b) What is solvable on the Web? [2M]
- c) Give an overview of Web ontology language. [2M]
- d) Describe ontology libraries. [2M]
- e) Explain about monotonic and nonmonotonic rules. [2M]
- f) What is descriptive logic? [2M]
- g) Explain about Stemming? [2M]
- h) Why is semantic web so useful for the development of web? [2M]
- i) Explain about Personal Networks. [2M]
- j) Give the significance of the blogs and wikis in Social Web. [2M]

PART-B

(50 Marks)

- 2.a) Explain how HTML limits the manipulation of information. [5M]
 - b) Discuss about the information age. [5M]
- OR**
- 3.a) Explain the difference between FOL and HOL. [5M]
 - b) Analyze the concept of Machine Intelligence and evaluate how the Turing Test assesses a machine's capability to exhibit intelligent behavior. [5M]
4. Explain Resources Description Framework (RDF) schema and its role in semantic web. [10M]
- OR**
- 5.a) Discuss about ontology methods, matching and mapping. [5M]
 - b) Explain sharing and merging. [5M]
- 6.a) Explain about inference engines. [5M]
 - b) Discuss about enterprise application integration. [5M]
- OR**
7. Explain in detail about logic, inference and rules. [10M]
- 8.a) Discuss about semantic search technology. [5M]
 - b) What is social network analysis? Explain. [5M]
- OR**
- 9.a) What is a search engine? Explain about search engines. [5M]
 - b) Explain about Electronic Discussion networks. [5M]
10. Explain the following:
 - a) Blogs and online communities. [5M]
 - b) Web based Networks. [5M]
- OR**
11. Explain in detail about the generic architecture of semantic Web applications. [10M]
