

# CBCS SCHEME

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20SCS22

## Second Semester M.Tech. Degree Examination, July/August 2022 Semantic Web and Social Networks

Time: 3 hrs.

Max. Marks: 100

*Note: Answer any FIVE full questions, choosing ONE full question from each module.*

### Module-1

- 1 a. Explain intelligent web applications. (10 Marks)  
b. Discuss about the World Wide Web. (10 Marks)

OR

- 2 a. Write a note on the information age. (10 Marks)  
b. Describe semantic road map. (10 Marks)

### Module-2

- 3 a. Explain how semantic web is used for knowledge representation. (10 Marks)  
b. Explain the basic elements of RDF language. (10 Marks)

OR

- 4 a. Explain Resource description framework schema. (10 Marks)  
b. Describe ontology web language. (10 Marks)

### Module-3

- 5 a. Explain the process of constructing ontology. (10 Marks)  
b. Discuss about methods, ontology sharing and merging. (10 Marks)

OR

- 6 a. Discuss about ontology engineering and ontology development tools. (10 Marks)  
b. Give an overview of the following:  
(i) Ontology logic rules (ii) Inference engines (10 Marks)

### Module-4

- 7 a. Explain the XML based web services. (10 Marks)  
b. What is the role of ontology in semantic web services? (10 Marks)

OR

- 8 a. Discuss about web search agents and semantic search technology. (08 Marks)  
b. Explain OWL-S service profiles. Explain how OWL-S ontology is created for web services. (12 Marks)

### Module-5

- 9 a. Explain how semantic web application is build with social network features. (10 Marks)  
b. In detail explain web based networks. (10 Marks)

OR

- 10 a. What is a search engine? Explain about search engines. (10 Marks)  
b. Write short notes on:  
(i) Blogs and online communities (ii) Electronics discussion network (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.