

**Indian Statistical Institute
Documentation Research and Training Centre**

**MS in Library and Information Science
Mid-Semester Exam (IV semester) (2024-2026)**

Paper – 18: SEMANTIC WEB

Date: 25.02.2026

Max Marks: 40

Time: 90 minutes

*Answer any **four** questions. All questions carry equal marks.*

1. Explain the various information retrieval problems associated with the traditional Web, particularly in relation to the motivation behind Semantic Web as originally propounded by Tim Berners Lee. [10]
2. What is knowledge representation? Discuss the fundamental differences between taxonomy, thesaurus, and ontology. [2+8]
3. Briefly, describe the followings with suitable examples: [10]
 - (i) rdfs:domain and rdf:range
 - (ii) rdf:type
 - (iii) rdfs:subClassOf
4. Draw a formal RDF/RDFS graph based on the following information: [10]

Rahul and Shyam are two friends who live in a city named Noida. Rahul completed his engineering from IIT Delhi. Shyam is an IT professional.
5. (a) Briefly describe RDF with an example. [5]
(b) Briefly describe an ontology editor. [5]