

P.G. Semester-IV Examination, 2023

Library and Information Science

Course ID : 43753

Course Code : LIS-403-CC

Course Title : Semantic Web Technology for Library
(Elective)

Time : 2 Hours

Full Marks : 40

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer any **four** of the following questions: $10 \times 4 = 40$

1. Write short notes on any **four** of the following:

$2\frac{1}{2} \times 4 = 10$

i) RDF Triple

ii) Metadata

iii) Open Data

iv) SPARQL-RDF Query Language

v) SKOS

vi) OWL

2. What is Semantic Web? Discuss the major components of Semantic Web Technologies.

3+7

3. Define RDF. Discuss the RDF elements and notations. Briefly discuss the RDF Graphs based model. 2+4+4
4. Define Ontology. Mention the types of Ontology and Briefly discuss the application areas of Ontology. 2+4+4
5. What is URI? What are the difference between URI and URL? Explain the URI characters and escape sequences? 2+3+5
6. Briefly discuss the W3C Recommendations. Explain the Semantic Web Framework of Jena architecture. 4+6
7. What is Link Open Data? Distinguish between Link Data and Open Data. Explore the use of LOD in Library systems. 2+3+5