b) What do you mean by ontology? What are the different types of OWL? (3+3)+(2+2)

5. a) What do you mean by SPARQL. Describe different queries with suitable examples.

b) Classify different types of OWL. Why the acronym of OWL is not abbreviated as WOL? (4+2)+(3+1)

6. a) Explain semantic search. Highlight different types of semantic searches?

b) Describe the role of professional organizations to spread the essence of semantic web in library services. 3+5+2

7. Differentiate between:

a) XML & HTML

b) Web 2.0 & 3.0

c) Machine Learning & Deep Learning

d) ASCII & Unicode 3+2+3+2

MASTER OF LIBRARY AND INFORMATION SCIENCE (DIGITAL LIBRARY) EXAMINATION, 2022

(2nd Year, 2nd Semester)

SEMANTIC WEB TECHNOLOGIES

PAPER – MLDL-15

Time : Two hours   Full Marks : 50

Answer **Q.No. 1** and *any four* **(4)** questions from the rest.

1. Define the following terms: $2\frac{1}{2} \times 4$

   a) NLP

   b) XML Namespace

   c) Machine Learning

   d) UNICODE

2. a) What is RDF? How does semantic web technology help in resource discovery?

   b) What are the features of RDF in relation to semantic web technology? (2+5)+3

3. a) Explain semantic web layers with a diagram.

   b) Describe the application of semantic web in digital library environment. 6+4

4. a) What is Artificial Intelligence? How does it help in natural language processing?

[Turn over