

- b) Write the GREL expression of following:
- Removes all spaces (replaces spaces with nothing).
 - Transform “Krishan Kumar” into
“<http://www.example.com/lod/KrishanKumar>.”
 - Convert the decimal 3.2 to 3 as string.
 - Convert the string “This is my University” to uppercase.
 - Construct the complete URI in the column “VIAF_URI” from reconciled value from the column “person_name2” with the preceding URI
“<http://viaf.org/viaf/>”.
7. Write short notes on **any two** of the following: 2×5
- MADSRDF and MODSRDF.
 - Namespace with example
 - Five star schema of LOD
 - Types of Ontology in Semantic web

MASTER OF LIBRARY AND INFORMATION SCIENCE

(DIGITAL LIBRARY) EXAMINATION, 2024

(2nd Year, 2nd Semester)

Semantic Web Technologies

Course : MLDL-15

Time : Two Hours

Full Marks : 50

Answer **any five** questions from the following: 5×10=50

- What is Semantic Web? How does it differ from RDF?
Discuss the RDF Resource, Property and Property value with an example. 2+2+6
- What is RDF/XML? Write three RDF/XML programmes by using the elements –
<rdf:Description>, <rdf:Bag>, <rdf:Seq>. 1+9
- What are options for representing the knowledge? How do we use graphs to represent knowledge? 4+6
- What is Linked Open Data (LOD)? State the objectives and design principles of LOD. What is RDF triples? Discuss it with an example. 2+4+2+2
- Write short description on DBpedia, DPLA, FAST, VIAF and GeoNames with current statistics. 10
- a) Discuss the steps to produce linked open data (URI links) with suitable RDF schema/ontology in the OpenRefine (Version: 3.7.2). 5+(5×1)

[Turn over