a) Map between the columns "MARC tag" and "MADSRDF class/properties" from the above table with appropriate class/properties.

b) After mapping between two columns, create a knowledge graph of above mapped table. 5+5=10

5. Make SPARQL queries from following with the endpoint– ***https://dbpedia.org/sparql/.*** 5×2=10

i) Find the resource of Kumar Sanu (the singer)

ii) List the people and their names who are born in Kolkata.

iii) Are there people who were born in Kolkata and died in Mumbai? (use an ASK query)

iv) Find 20 people (URI and place of death) who were born in Kolkata, but died elsewhere.

v) Give a list of countries and their French ('FR') labels.

6. Write short note from following (any two): 2×5=10

i) RDF vs RDFS

ii) Schema.org

iii) OpenRefine

iv) SKOS

MASTER OF LIBRARY AND INFORMATION SCIENCE
(DIGITAL LIBRARY) EXAMINATION, 2023

(2nd Year, 2nd Semester)

Semantic Web Technologies

Course : MLDL-15

Time : Two Hours   Full Marks : 50

The figures in the margin indicate full marks.

Answer any *five* questions.

1. What is semantic web? Discuss the components of semantic web. State the advantages of RDF over XML. 2+3+5=10

2. Define the term "Ontology". Discuss the concedpt of Taxonomy and Inference rule. Discuss the various projects of semantic web. 2+4+4=10

3. Create a RDF/XML file by using "determ" namespace for five records with at least five properties. 10

4.
Sl No.	MARC tag	Related Column	MADSRDF class/properties
1.	100$a	person_name	?
2.	372$a	field_activity	?
3.	373$a	associated_group	?
4.	374$a	occupation	?
5.	377$a	associated_anguage	?