

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

**MS in Library and Information Science
Mid-Semester Exam (IV semester) (2020-2022)**

Paper –20 : SEMANTIC WEB

Date: 08.03.2022

Max Marks: 40

Time: 90 minutes

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

1. What is Semantic Web (SW)? Briefly, describe any three layers of Tim-Berners Lee defined SW technology stack. [2+8]
2. Briefly, illustrate the information search problems using the traditional search engines on the Web. Briefly, discuss the possible solutions which would improve the information search problems on the Web. [5+5]
3. What is ontology? Briefly, discuss the various types of ontologies considering the scope of object description as the classification criteria. [2+8]
4. (a) Briefly discuss the essential features of a KR language. [5]
(b) Draw a formal RDF graph for the following statement: *Colon Classification, a faceted classification system, developed by S. R. Ranganathan. The first edition was published in 1933.* [5]
5. (a) Discuss the differences between a thesaurus and an ontology. [5]
(b) Briefly, illustrate RDF Collection. [5]