**Course: Advance Bio Informatics**

**Module Title: Components of SW**

**Module No: 71**

**RDF:** a general method for describing info.

**SPARQL:** an RDF query language

**N-Triples:** a format for storing/transmitting data

**OWL:** Family of know. Representation languages.

**Agents**

Provide automation services**.** Should not be designed toreplace humans or to makedecisions

Examples: Web spiders & Crawlers

**Rule Interchange**

**Format (RIF):** framework of web rule language dialects supporting rule interchange on the Web

**Uniform Resource Identifiers:** Provide amechanism for identifyingavailable resources**.** The super-set of URNs, URLs and URCs

**Web services:** Allow computer applications to communicate directly with each other over the Internet

**Inference rules:** Define the relationships and rules between data

**Service discovery**

Allows applications to find ontologies and agents.

**Semantic aware apps:** Applications that canmake use of semantic information**,** Security and trust

**Implementation**

Convert data to XML format according to defined XML schemas. Expose applications as Web services. Build ontologies that specify semantic meanings and the relationships between data.

It is automate search processes. Automate other business processes and rules between data