

# GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Semester: IV

M.E. Information Technology

Subject Name: **Web 2.0 & Semantic Web**

Sr.No	Course content
1.	<b>Introduction to Web Intelligence:</b> Historical Perspective ,Toward an Intelligent Web ,Knowledge ,Web Mining , Building Better Web Sites Using Intelligent Technologies , Benefits of Intelligent Web
2.	<b>Information Retrieval:</b> Introduction , Document Representation , Retrieval Models , Evaluation of Retrieval Performance , Public Domain Information Retrieval Systems
3.	<b>Semantic Web:</b> Introduction , The Layered-Language Model , Metadata and Ontologies , Ontology Languages for the Web , Issues that May Affect the Development of Semantic Web
4.	<b>Classification and Association:</b> Introduction ,Data Preparation , Classification , Association
5.	Hello Web 2.0 World. Introducing BuzzWatch.,Charting the Landscape.,Exploring Behind the Scene.,Making BuzzWatch a Better Web Citizen.,Making BuzzWatch More Maintainable.
6.	Page Presentation. Creating Clean and Simple Pages.,From HTML to XHTML., The Document Object ,odel.Cascading Style Sheets.,Tools.
7.	JavaScript and Ajax. JavaScript: Understanding Lesser-Known but Crucial Features.,JavaScript,Optimizations.,Ajax.
8.	Design Principles. Common Design Issues.,
9.	What's Next for Web 2.0? XSLT and XPath.,SVG.,XForms.,What's Next for HTML.
10.	Rich Client Alternatives. From Browsers to Rich Clients.,Comparing Rich Client Frameworks.
11.	HTTP and URIs.,How the Web Was Won.,Web 1.0: HTML, URLs, and TTP. The Web Model and REST. Considerations for Building an HTTP Service. What's on the Wire?,More Representation
12.	XML and Its Alternatives. XML.,Alternatives to XML.Summary.

13.	Syndication. Some Syndication Basics.The Syndication Process.,Syndication Formats.
14.	Microformats. The Basics of Microformats. Creating Microformat Documents. Summary.
15.	Combining Protocols to Build Web Services. Clarifying Web Services.REST Services. WS-* Services. REST versus WS-*. Summary.
16.	Serving XML over HTTP. How Is Serving HTML Different? Serving Static Content.Serving Dynamic Content.XQuery and XML Databases. Serving JSON. Summary.
17.	Databases and Non-XML Sources. Dealing with Non-XML Sources.Converting Relational Data to XML. Converting Binary Data to XML. Summary.
18.	Creating Syndication Channels. A Simple Atom Service. Running the Application. Adding E-mail Support. Summary.
19.	Mashups, HTML Scraping, and Web Services. Popular Examples: Mapping Mashups. Why Use Mashups? The Business Model of Mashups. Screen Scraping. Creating Feeds. Mapping and Badges. Summary.
20.	Implementing and Maintaining Your URI Space. Future-Proofing Your URIs. Managing Change in Your URI Space. Your URI Mapping Toolbox. Summary.
21.	Podcasting and Serving Multimedia. The Formats Labyrinth. Protocols. Summary.
22.	Introduction to Web Intelligence: Historical Perspective ,Toward an Intelligent Web ,Knowledge ,Web Mining , Building Better Web Sites Using Intelligent Technologies , Benefits of Intelligent Web

## **Reference Books:**

1. Professional Web 2.0 Programming by Eric van der Vlist, Danny Ayers, Erik Bruchez(Wrox Publication)
2. Building an intelligent Web: theory and practice By Rajendra Akerkar, Pawan Lingras
3. WEB CRAWLERS AND SEARCH ENGINES By Mike Thelwall