Course Name : Essentials of XML	**Course Code: ITDB4108**
Pre-Requisite : 1) Introduction to Web Technology 2) Object Oriented Programming (Java)	**Credit Hours:** 3
Passing Grade : C	**Level:** Year 4
No. Of Theory & Practical Hours : 0 : 4	

Goal: The course provides knowledge of XML, implementation and deployment of AJAX with XML.

Objectives: The course should enable the student to:

1. Examine functions and features of XML and AJAX.
2. Apply DTD, Namespaces and XSL to XML documents
3. Work with XPath in XML documents.
4. Design databases using XML
5. Apply Java Script to manipulate DOM objects
6. Use AJAX to handle data.
7. Use JSON objects, Web Services , API and Protocol in AJAX

Outcomes At the end of this course, students should be able to:	**Method**
1. Explain the functions and features of XML.	Theory
2. Construct XML document.	Practical
3. Construct Document Type Definition (DTD).	Practical
4. Use namespace required for XML document.	Practical
5. Construct XSL (EXtensible Stylesheet Language) document using XML document.	Practical
6. Employ XPath on XML document.	Practical
7. Convert XML documents to relational and open database and the vice versa.	Practical
8. Use DOM objects in Java Scripts	Practical
9. Explain the functions and features of AJAX.	Theory
10. Use AJAX to handle Http objects	Practical
11. Create AJAX scripts to handle databases, XML Documents and Text Files.	Practical
12. Create AJAX based applications that use JSON objects on client and server side	Practical
13. Create AJAX based applications that use Web Services, API and Protocols	Practical

Hardware / Software Tools:
Microsoft visual studio OR
Netbeans

Text Book:
Pitts .N, (2001), XML Black Book, Distributed by IDG Books India (P) Ltd, New Delhi– 110002

Reference Book:

1. Harold .E .R, (2006), XML 1.1 Bible, Distributed by IDG Books India (P) Ltd, New Delhi – 110002
2. Williamson H , (2001),XML:The Complete Reference, McGraw-Hill Companies