

BC 301 OPEN SOURCE SYSTEMS

Course Description and Objectives

It makes familiar of Open Source technologies like Linux, UNIX, Perl, MySQL, CGI, PHP, and AJAX which are used to develop web programming.

Course Outcomes:After Completion of the subject student should able to

- Students will get knowledge on Apache Web Server that is how to install, how to start server, how to stop, and how to restart and how to create simple static web pages
- Students get information about the differences and similarities between PERL and other programming languages like C, C++, JAVA and MYSQL
- Students can do CGI programs very effectively by these programs students can do database programs by connecting to the MYSQL server through DBI.
- Student can configure PHP files.

UNIT – 1 Introduction & Linux

Open Source Software, Structural Part: Web explained, How it works.
Introduction, Basic UNIX, Apache Web Server.

UNIT – 2 Perl & MySQL

Introduction, Perl Documentation, Syntax Rules, A Quick Introduction to OOP.
Introduction, Database Independent Interface, Table Joins, Loading & Dumping a Database.

UNIT – 3 The Common Gateway Interface

Introduction, Apache Configuration, A First CGI Program, CGI.pm Introduced, CGI.pm HTML Shortcuts, Information received by the CGI Program, Form Widget Methods, CGI Security Considerations.

UNIT - 4 PHP

Introduction, Embedding PHP into HTML, Configuration, Language Syntax, Built-in PHP Functions, PHP & MySQL

UNIT – 5 PHP5 & AJAX

Procedural Programming versus OOP, Basic Class Definitions, Visibility, Constructors and Destructors, Static Keyword, Class Constants, Assignment versus Cloning
XMLHTTP and XMLHttpRequest, The Interfaces, Working with the Interfaces, Handling the Response, AJAX Libraries: SAJAX , CPAINT , JPSPAN.

TEXT BOOK :

1. James Lee, Brent Ware, "Open Source Web Development with LAMP", 4th ed., Addison Wesley Publishers, 2002.

REFERENCE BOOK :

1. Jason Gerner, Elizabeth Naramore, Morgan Owens, Matt Warden, "Professional LAMP", 1st ed., Wiley Publications, 2006.