

DETAILED SYLLABUS

Unit – I

10 HRS

1.1 Introduction : Need of Open Sources – Advantages of Open Sources – Applications – FOSS – FOSS usage – Free Software Movement, Commercial aspects of Open Source movement - Certification courses issues - global and Indian. Application of Open Sources

1.2 Open source operating systems : LINUX – features of linux – linux architecture

1.3 Linux advanced concepts : Scheduling, Time Accounting, Personalities, Cloning, Backup, Linux signals, Development with linux.

Unit – II

13 HRS

2.1 Introduction: What is PHP? - Basic Syntax of PHP - programming in web environment - Common PHP Script Elements - Using Variables - Constants – Data types - Operators; Conditional Statements – if-else, switch; Loops- while, do..while, for; Arrays – Functions – String Manipulating functions, string searching functions- and Regular Expression

2.2 File Handling – Reading local and remote files, reading file into string – reading file into array – writing files

2.3 Working With Forms -Processing Forms -Form Validation –

2.4 Advanced PHP concepts: Handling Cookies, sessions and headers.

Unit –III

12 HRS

3.1 MySQL: Setting up an account - Starting, Terminating and writing your own MySQL Programs – Syntax for CREATE DATABASE, CREATE TABLE, INSERT INTO, SELECT, DELETE FROM, ALTER TABLE statements, using WHERE clause and ORDER BY keyword - Working with Strings – string concatenation and comparison – Date and Time functions – Generating Summary – Working with Metadata – Using Sequences – MySQL and Web

3.2 PHP and SQL database: PHP and LDAP ; PHP Connectivity ; Sending and receiving emails

3.3 PHP Database Connectivity: MySql connection using PHP scripts, creating a database, table, inserting data from a form into database, selecting data from a database and displaying in a HTML table

Unit – IV

15 HRS

4.1 Basic features of Python: Overview – Installing – Running in windows/Linux

4.2 Variables and Strings: Data types - Operators – Decision Control – Conditional Statements - Loops – Example Programs

4.3 Sequences: Lists: Indexing and slicing –methods-Fixed size lists and arrays – Lists and Loops – Assignment and references –Identity and equality – Sorted lists – Tuples: Indexing and slicing, Tuples and string formatting – String functions - Sets: Unordered Collections – Simple programs

4.4 Dictionaries : Basic operations with dictionary – Combining two dictionaries with UPDATE – Making copies – Internal Dictionaries

4.5 Functions and Files : Functions - File Handling – Exception – Handling Exceptions

Unit – V

15 HRS

5.1 WEB SERVER : Apache Web server – Working with web server – Configuring and using apache web server

5.2. Open Source Software tools and Processors : Introduction – Eclipse IDE Platform – Compilers – Model driven architecture tools

5.3 CASE STUDY: Government Policy toward OpenSource (E- Governance) – Wikipedia as an open Source Project

REFERENCE BOOKS:

Sl.No.	Name of the Book	Author	Publisher
1.	The Complete Reference Linux	Richard Peterson	TataMcGraw Hill, New Delhi Third Edition
2.	Web Programming	Chris Bates	Wiley India, New Delhi Third Edition, Reprint 2011
3.	MySQL Bible	Steve Suchring	John Wiley sons 2002
4.	Programming PHP	Rasmus Lerdorf and Levin Tatroe	O'Reilly Publications2002 2002

WEBSITES

<http://developer.android.com>

Learning to Program - A free Python web-book by Alan Gauld

<http://www.freenetpages.co.uk/hp/alan.gauld/>

http://en.wikibooks.org/wiki/Python_Programming