35282 – OPEN SOURCE SOFTWARE

<u>DETAILED SYLLABUS</u>

Unit – I

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 software operating systems – LINUX – features of linux – linux architecture - Linux advanced concepts

1.3 Open SPARC Project – Open source compilers – Model driven architecture – Eclipse IDE Platform

Unit – II

2.1 Introduction: What is PHP? - Basic Syntax of PHP - programming in web environment - Common PHP Script Elements - Using Variables - Constants – Data types - Operators ; Statements - Working With Arrays –Using Functions – OOP - String Manipulation and Regular Expression

2.2 File and Directory Handling - Including Files - File Access

2.3 Working With Forms -Processing Forms -Form Validation – Introduction to advanced PHP concept Simple programs Using PHP

Unit –III

3.1 MySQL: Introduction - Setting up an account - Starting, Terminating and writing your own MySQL Programs – Record Selection Technology - Working with Strings – Date and Time - Sorting Query Results module – 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: Retrieving data from MySQL - Manipulating data in MySQL using PHP

Unit – IV

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: Introduction –Fixed size lists and arrays – Lists and Loops – Assignment and references –Identity and equality – Sorted lists – Tuples: Tuples and string formatting – String functions - Sets: Unordered Collections – Simple programs Dictionaries, Sets)Using modules – File Handling -Exception – Handling exception

4.4 Dictionaries : Introduction – Combining two dictionaries with UPDATE – Making copies – Persistent variables – Internal Dictionaries

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

Unit – V

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

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

REFERENCE BOOKS:

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 Publications 2002