

**OPEN SOURCE SOFTWARE
(Open Elective-III)**

UNIT-I:

INTRODUCTION: Introduction to Open sources – Need of Open Sources – Advantages of Open Sources– Application of Open Sources. Open source operating systems: **LINUX:** Introduction – General Overview – Kernel Mode and user mode

UNIT-II:

LINUX: Process – Advanced Concepts – Scheduling – Personalities – Cloning – Signals – Development with Linux.

UNIT-III:

OPEN SOURCE DATABASE: MySQL: Introduction – Setting up account – Starting, terminating and writing your own SQL programs – Record selection Technology – Working with strings – Date and Time– Sorting Query Results – Generating Summary – Working with metadata – Usings equences – MySQL and Web.

UNIT-IV:

OPEN SOURCE PROGRAMMING LANGUAGES : PHP: Introduction – Programming in web environment – variables – constants – data types – operators – Statements – Functions – Arrays – OOP – String Manipulation and regular expression – File handling and data storage

UNIT-V:

PHP and SQL database –PHP and LDAP – PHP Connectivity – Sending and receiving E-mails – Debugging and error handling – Security – Templates.

UNIT-VI:

PYTHON : Syntax and Style – Python Objects – Numbers – Sequences – Strings – Lists and Tuples – Dictionaries – Conditionals and Loops

UNIT-VII:

Files – Input and Output – Errors and Exceptions – Functions – Modules – Classes and OOP – Execution Environment.

UNIT-VIII:

PERL : Perl backgrounder – Perl overview – Perl parsing rules – Variables and Data – Statements and Control structures – Subroutines, Packages, and Modules- Working with Files –Data Manipulation.

TEXT BOOKS:

1. Remy Card, Eric Dumas and Frank Mevel, “The Linux Kernel Book”, Wiley Publications, 2003
2. Steve Suchring, “MySQL Bible”, John Wiley, 2002

REFERENCE BOOKS:

1. Rasmus Lerdorf and Levin Tatroe, “Programming PHP”, O’Reilly, 2002
2. Wesley J. Chun, “Core Python Programming”, Prentice Hall, 2001
3. Martin C. Brown, “Perl: The Complete Reference”, 2nd Edition, Tata McGraw-Hill Publishing Company Limited, Indian Reprint 2009.
4. Steven Holzner, “PHP: The Complete Reference”, 2nd Edition, Tata McGraw-Hill Publishing Company Limited, Indian Reprint 2009.
5. Vikram Vaswani, “MYSQL: The Complete Reference”, 2nd Edition, Tata McGraw -Hill Publishing Company Limited, Indian Reprint 2009.