

OBJECTIVE

This course comprehends the concepts of core java and working principles of Internet, and the knowledge will be enhanced to the client and server side programming and web development.

UNIT – I JAVA FUNDAMENTALS 12

Overview of Java, Fundamental Programming Structures, Strings – Objects Classes and Methods - Inheritance - Packages and Interfaces - Exception handling, Collections - Multithreading – Java I/O Streams, File Handling.

UNIT – II INTERNET BASICS AND JAVA NETWORK PROGRAMMING 12

Internet Addressing, Browsers, Servers, Protocols – Web Application Architectures, Development – Scripting Languages – Databases – Search Engines – Web Services – Collective Intelligence – Mobile Web – Features of Web 3.0

Overview of Java Networking - TCP - UDP - InetAddress and Ports - Socket Programming - Working with URLs - Internet Protocols simulation - HTTP - SMTP - POP - FTP - Remote Method Invocation.

UNIT – III CLIENT-SIDE PROGRAMMING 12

Scripting for content structuring, form design, client side validation, dynamic page generation, adding interactivity, styles, using HTML, DHTML, XHTML, CSS, Java Script – XML - Document Type Definition - XML Schema - Document Object Model - Presenting XML - Using XML Parsers: DOM and SAX - Evolution of AJAX - Web applications with AJAX - AJAX Framework - AJAX with PHP - AJAX with Databases – Java Applets – AWT-Swing

UNIT – IV SERVER-SIDE PROGRAMMING 12

Types of servers - Configuring and Using Web servers, Setting up Databases, Java Database Connectivity -Handling form data, validation, querying databases, information retrieval, response generation, Session management - using PHP, Servlets, JSP.

UNIT – V WEB APPLICATION DEVELOPMENT 12

Creating Interactive Websites - Search engines – cookies - Blogs - Social web applications - developing WIKI pages – Programming for the Mobile web.

TOTAL : 60**TEXT BOOKS:**

1. Herbert Schildt, “Java The Complete Reference”, 8th Edition, McGraw-Hill

- Osborne Media, 2011.
2. Paul Deitel, "Internet & World Wide Web: How to Program", Prentice Hall, 4th Edition, 2007.

REFERENCES:

1. Cay S. Horstmann and Gary Cornell, "Core Java™, Volume I – Fundamentals" 8th Edition, Prentice Hall, 2007.
 2. Cay S. Horstmann and Gary Cornell, "Core Java, Vol. 2: Advanced Features", 8th Edition, Prentice Hall, 2008.
 3. Robert W. Sebesta, "Programming the World Wide Web", Addison-Wesley, Sixth Edition, 2010.
 4. Elliotte Rusty Harold, "Java Network Programming", Third Edition, O'Reilly, 2004.
 5. Uttam K.Roy, "Web Technologies", Oxford University Press, 1st Edition, 2010.
 6. Leon Shklar and Rich Rosen, "Web Application Architecture: Principles, Protocols and Practices", Wiley, 2nd Edition, 2009.
 7. <http://www.w3schools.com/>
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