

**ELECTIVE COURSE-II - JAVA PROGRAMMING**

**UNIT I**

Data Types and Variables: The Simple Types – Literals – Variables – Type Conversion and Casting – Automatic type Promotion in Expressions – Arrays – strings – Classes and Methods: Class Fundamentals – Declaring Class Objects – Constructors – Garbage Collection – The finalize () Method Overloading Methods – Argument Passing – Recursion – Understanding Static – Access Control – The main () method.

**UNIT II**

Operators: Arithmetic Operators – Bit wise Operators – Relational Operators – Boolean Logical Operators – The Assignment Operator – The ? Operator –The Dot Operator – Operator precedence - -Inheritance, Packages, and Interfaces: Inheritance – Using Super – When Constructors are called – Method Overriding – Abstract – Classes. The final Keyword – packages – Importing Packages – Access Control – Interfaces – Keyword Summary.

**UNIT III**

The Language Classes and Interfaces – The Utility Classes and Interfaces – The Input/Output Classes and Interfaces.

**UNIT IV**

The Networking Classes and Interfaces – The Java Applet Class and Interfaces

**UNIT V**

The Abstract Window Toolkit Classes and Interfaces – the Event Classes and Interfaces.

**Books for Study:**

“Java – Programmer” – Reference”. Herbert Schildt with JocO’Neil, Tata McGraw Hill, 1998.

**Books for Reference:**

1. “Internet Programming”, Kris James Ph.D., and Ken Cope, Galgotia Publication, Reprint 2000.
2. “Java Unleashed”, Michael Morrison, Second Edition
3. “Complete Reference”, Patrick Naughton and Herbert Schildt, 3<sup>rd</sup> Edition, Tata McGraw Hill Publishing company Ltd., 1999