

Syllabus for B. Sc. 3rd Year (Semester -V)
Subject: - Information Technology
Core Java Programming (IT-05)

Unit I

An overview to Java, Comparison with other languages (C & C++), Java and Internet, Features of Java, Introduction to Java Virtual machine, Object Oriented Programming Concepts (Abstraction, Encapsulation, Inheritance, Polymorphism).

Unit II

Data types: Integers, Floating point, Character type, Boolean, Variables: Assignment, Initialization and Conversions. Operators: Arithmetic, Assignment, Modulus, Relational, Boolean, Bitwise. Precedence Summary, Unicode Character Set

Unit III

Arrays: Single and Multidimensional. Input, Output, Error Statements, Control Statements and Looping Structures., Typecasting, Classes & Objects: Class Fundamentals, declaring objects, exploring new operator, creating methods, Constructors, types of constructors, using this keyword

Unit IV

Inheritance: Basics of Inheritance, Super class, Member Access, creating a Multilevel Hierarchy, Method Overriding.

Packages & Interfaces: Defining and importing packages, Understanding Class path, Defining and implementing interfaces

Recommended Books

- 1) Programming with Java, EBalaguruswamy, Tata Mc Graw Hill
- 2) Java The Complete Reference, Herbert schidt, Tata Mc Graw Hill
- 3) Java How to program, Dietel and Dietel, Pearson Education