

**CORE COURSE –II - OBJECT ORIENTED PROGRAMMING WITH JAVA**

**Objective:** *To teach students about developing object oriented programs using JAVA language (and side-by-side the JAVA language itself).*

**UNIT-I**

Problem solving – Simple computations – Primitive types, Expressions, variables- Using Objects – Decisions, Iteration

**UNIT-II**

Basic JAVA classes, packages - Java class hierarchy – Writing complex programs using Packages, User defined classes and flow control statements.

**UNIT-III**

GUI based programming – Methods, Classes – Arrays and Collection.

**UNIT-IV**

Inheritance, Polymorphism, Overloading – Examples – Exception Handling – Threads.

**UNIT-V**

Files and Streams- Graphics – Applets – JDBC programming.

**TEXT BOOK:**

1. **James P Cohoon & Jack W Davidson**, Programming in JAVA 5.0 (JAVA 2.0 SDK 1.5), Tata McGraw Hill, First Indian Edition, 2007 (ISBN 0-07-063440-8) [ **Unit-1** :(Chapters 1,2,3,5,6) ;**Unit-2** : (Chapters 4,5,6) **Unit-3** (Chapters GUI-Interlude-1, 7,8,9) ; **Unit-4** (Chapters 9,10, GUI-Interlude-2,12 ) ; **Unit-5** (Chapters 14,15,16 of TEXTBOOK-2) ]
2. **Balaguruswamy E.**, Programming with JAVA - A Primer, Tata McGraw Hill, Third Edition, 2005

**REFERENCE BOOK**

1. **Krishnamurthy. R, Prabhu**, Internet & JAVA programming, New Age publishers, New Delhi, 2004.
2. **Deitel.H.M & Deitel.P.J**, JAVA- How to program, Sixth edition, Prentice Hall of India/Pearson Education, 2006 (ISBN 81-203-2800-0).