B. Sc. 502
Java Programming

Unit I:
C++ Vs JAVA, JAVA and Internet and WWW, JAVA support systems, JAVA environment. JAVA program structure,Tokens, Statements, JAVA virtual machine, Constant & Variables, Data Types, Declaration of Variables, Scope of Variables, Symbolic Constants, Type Casting. Operators : Arithmetic, Relational, Logical, Assignments, Increment and Decrement, Conditional, Bitwise, Special.

Unit II:
If statement, if…else… statement, Nesting of if…else… statements, else…if Ladder, Switch, ? operators, Loops – while, do, for.
Defining a Class, Adding Variables and Methods, Creating Objects, Accessing Class Members, Constructors, Methods Overloading, Static Members, Nesting of Methods.
Inheritance: Extending a Class, Overriding Methods, Final Variables and Methods, Final
Classes, Finalize Methods, Interfaces and Packages, Abstract methods and Classes, Visibility Control.

Unit III:
Arrays: One Dimensional & two Dimensional, strings, Vectors, wrapper Classes, Defining Interface Extending Interface, Implementing Interface, Accessing Interface Variable, System Packages, Using System Package, Adding a Class to a Package, Hiding Classes.

Unit IV:
Creating Threads, Extending the Threads Class, Stopping and Blocking a Thread, Life Cycle of a Thread, Using Thread Methods, Thread Exceptions, Thread Priority, Synchronization, Implementing the Runnable Interface.

Unit V:
Local and Remote Applets Vs Applications, Writing Applets, Applets Life Cycle, Creating an Executable Applet, Designing a Web Page, Applet Tag, Adding Applet to HTML File, Running the Applet, Passing Parameters to Applets, Aligning the Display, HTML Tags & Applets, Getting Input from the User.

References:

1. Java: The Complete Reference: Herbert Schildt
2. Introduction to Java Programming : Balagurusamy