Java Programming

UNIT - I	INTRODUCTION	Hrs
Fundamentals of Object-Oriented Programming - Java Features - Difference between Java and C - Java Environment - Overview of Java Language: Introduction - Simple Java Program - Java Program Structure - Java Tokens - Java statements - Implementing a Java program - Java Virtual Machine - Command line arguments - Constants, variables and Data Types - Operators and Expressions - Branching and Looping		9
UNIT - II	**BASIC CONSTRUCTS**	**Hrs**
Class: Introduction - Defining a Class - Fields Declaration - Methods Declaration - Creating Objects - Accessing Class Members - Constructors - Method Overloading - Static Members - Nesting of Methods - Arrays, Strings and Vectors: Introduction - One-Dimensional Arrays - Creating an Array - Two-Dimensional Arrays - Strings		9
UNIT - III	**INHERITANCE AND INTERFACES**	**Hrs**
Inheritance: Extending a class - Overriding methods - Final Variables and Methods - Final Classes - Finalizer Methods - Abstract Methods and Classes - Visibility Control - Interfaces: Multiple Inheritance: Introduction - Defining Interfaces - Extending Interfaces - Implementing Interfaces - Accessing Interface Variables		9
UNIT - IV	**PACKAGES AND MULTITHREADING**	**Hrs**
Packages: - Java API Packages - Using System Packages - Naming Conventions - Creating Packages - Accessing a Package - Using a Package - Adding a Class to a Package - Hiding Classes - Multithreaded Programming: Introduction - Life Cycle of a Thread - - Creating Threads - Extending the Thread Class - Implementing the ‘Runnable’ Interface - Stopping and Blocking a Thread -- Using Thread Methods		9
UNIT - V	**EXCEPTION AND I/O HANDLING**	**Hrs**
Exception Handling: Introduction - Types of Errors - Exceptions - Syntax of Exception Handling Code - Multiple Catch Statements - Using Finally Statement - Throwing Our Own Exceptions - Input/output: Introduction - Concept of Streams - Stream Classes - Byte Stream Classes - Character Stream Classes - Handling Primitive Data Types - Simple input and output		9