



Core Java Pune University Syllabus

- **Introduction to Java**

- Features of java
- JDK Environment & tools like (java, javac, appletviewer, javadoc, jdb)
- OOPs Concepts
- Class, Abstraction, Encapsulation
- Inheritance, Polymorphism
- Difference between C++ and JAVA
- Structure of java program
- Data types, Variables, Operators
- Keywords, Naming Convention
- Decision Making (if, switch)
- Looping (for, while)
- Type Casting
- Array
- Creating an array
- Types of Array
- One Dimensional arrays
- Two-Dimensional array
- String
- Arrays, Methods.
- String Buffer Class

- **Classes and Objects**

- Creating Classes and objects
- Memory allocation for objects
- Constructor
- Implementation of Inheritance
- Simple, Multilevel,
- Interfaces
- Abstract classes and methods
- Implementation of Polymorphism
- Method Overloading, Method
- Overriding
- Nested and Inner classes.
- Modifiers and Access Control
- Packages
- Packages Concept
- Creating user defined packages
- Java Built in packages
- java.lang->math
- java.util->Random, Date,
- Hashtable
- Wrapper classes

- **Collection**

- Collection Framework.
- Interfaces
- Collection
- List
- Set
- SortedSet
- Enumeration
- Iterator
- ListIterator
- Classes
- LinkedList
- ArrayList
- Vector
- HashSet
- TreeSet
- Hashtable
- Working with maps
- Map interface
- Map classes
- HashMap
- TreeMap

- **Exception Handling**

- Exception types
- Using try catch and multiple catch
- Nested try, throw, throws and finally
- Creating user defined Exceptions

- **File Handling**

- Stream
- ByteStream Classes
- CharacterStream Classes
- File IO basics
- File operations
- Creating file
- Reading file (character, byte)
- Writing file (character, byte)

- **Applet, AWT, Swing Programming**

- **Applet**

- Introduction
- Types applet
- Applet Life cycle
- Creating applet
- Applet tag
- Applet Classes
- Colour
- Graphics
- Font

- **AWT**

- Components and container used in AWT
- Layout managers
- Listeners and Adapter classes
- Event Delegation model

- **Swing**

- Introduction to Swing Component and
- Container Classes