Core Java Syllabus

Introduction:

- ➢ **What is Java?**
- ➢ **Why use java?**
- ➢ **Java Installation**
- ➢ **Features of Java programming**
- ➢ **Basic syntax**

Data Types:

- ➢ **Integer**
- ➢ **Float**
- ➢ **Char**
- ➢ **Boolean**
- ➢ **String**

Operators:

- ➢ **Arithmetic operators**
- ➢ **Assignment operators**
- ➢ **Comparison operators**
- ➢ **Logical operators**

Decision statements:

- ➢ **If statements**
- ➢ **If-else statements**
- ➢ **Else-if statements**
- ➢ **Switch statements**

Looping statements:

- ➢ **While statements**
- ➢ **Do-while statements**
- ➢ **For statements**
- ➢ **Break statements**
- ➢ **Continue statements**

OOPS Concepts:

- ➢ **Class**
- ➢ **Object**
- ➢ **Abstraction**
- ➢ **Encapsulation**
- ➢ **Inheritance**
- ➢ **Polymorphism**

Method or Function:

- ➢ **What is Function**
- ➢ **Function parameters**
- ➢ **Function overloading**
- ➢ **Java Recursion**

Array:

- ➢ **What is Array?**
- ➢ **What are the types of Arrays?**
- ➢ **Explain Single Dimension Array**
- ➢ **Explain Multidimensional Array**

Interface:

- ➢ **Abstract classes**
- ➢ **Interfaces explanation with examples**
- ➢ **Creating User interfaces using controls**
- ➢ **Java string**

Java Swings:

- ➢ **By creating the object of Frame class**
- ➢ **By extending Frame class**

Util packages:

- ➢ **Introduction of Util packages**
- ➢ **Util packages with example**

Exception Handling:

- ➢ **What is Exception in java?**
- ➢ **What is Exception Handling?**
- ➢ **Types of java Exception?**
- ➢ **Try-Catch Block**
- ➢ **Multiple Catch Block**
- ➢ **Nested try Block**
- ➢ **Finally block**

Thread:

- ➢ **What is Thread**
- ➢ **Introduction example of Thread**
- ➢ **What is Multithreading**
- ➢ **Introduction example of Thread**

Even Handling:

- ➢ **What is Even Handling**
- ➢ **Explain Even Handling with Examples**
- ➢ **Serialization and Deserialization in java**

Memory:

- ➢ **Java heap Memory**
- ➢ **Java Stack Memory**

Networking:

- ➢ **Java Networking**
- ➢ **Practice with java Networking**

I/O Stream:

- ➢ **Introduction of I/O Stream**
- ➢ **Practice with I/O Stream**

Database:

- ➢ **Introduction of Database**
- ➢ **Explain Database management**

Practice:

- ➢ **Practice with JDBC Examples**
- ➢ **Internationalization**
- ➢ **Java New features**

Project:

- ➢ **Mini project with Explanation**
- ➢ **Guidelines to create a Project**