

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>1153IT201</b>	<b>JAVA PROGRAMMING</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>3</b>

### **UNIT – I Basics of Java**

History and Features of Java - Difference between JDK,JRE and JVM – Basic Language Elements - Lexical Tokens, Identifiers, Keywords, Literals, Comments ,Primitive Datatypes, Operators Assignments, I/O Operations

### **UNIT – II Classes and Objects**

Advantage of OOPs - Object and Class - Method Overloading – Keywords – this, super, final, strictfp – call by value – call by reference - Nested classes - Constructor – Arrays

### **UNIT – III Inheritance**

Benefits - Types – Inheriting Data Members and Methods - Method Overriding – Polymorphism – Abstract classes and methods – Implementing Interfaces

### **UNIT – IV Multithreading**

Multithreading - Life Cycle of a Thread - Creating Thread - Thread Scheduler - Sleeping a thread - Joining a thread - Thread Priority - Thread Pooling - Thread Group - Performing multiple task by multiple thread - Runnable class

### **UNIT – V Packages and Exception handling**

Packages - Organizing Classes and Interfaces in Packages - Package as Access Protection - Defining Package - Naming Convention For Packages. Exceptions – Types - Control Flow In Exceptions, JVM reaction to Exceptions – try – catch - - finally – throw - throws in Exception Handling - In-built and User Defined Exceptions

#### **A. Learning Resources**

##### **TEXT BOOK**

1. Herbert Schildt, “Java – The Complete Reference”, Ninth edition, Oracle press.

##### **REFERENCES**

1. Simon Kendal, “Object oriented Programming using Java”, First Edition, Pearson Education
2. E. Balagurusamy, “Programming with Java – A Primer”, Third edition, McGraw-Hill companies