**Object Oriented Concepts Using Java Programming**

**UNIT – I**

**Java Programming**

**Basic concepts of object-oriented programming**

Objects

Classes

Abstraction

Encapsulation

Inheritance

Polymorphism

Dynamic binding

Message passing

**Java features**

JVM

Byte code interpretation

**Simple java program**

Command line argument

**Data types**

Type casting

**Operators**

Arithmetic

Increment

Decrement

Relational

Logical

bit wise

conditional

**Expressions**

**UNIT – II**

**Decision making and branching**

if

if…else

else if

switch

**Looping**

**Classes**

**Objects**

Methods

Visibility control

**Constructors**

Wrapper classes

Nesting of methods

**Arrays and strings handling**

**Polymorphism**

Function overriding

Operator overloading

Final classes

**UNIT – III**

**Inheritance**

Types of Inheritance

**Abstract class**

**Interfaces**

**Packages**

**Multithreaded programming**

Extending thread

Life cycle of thread

Using thread methods

Thread priority

Synchronization

**Exception Handling**

Exception-Handling fundamentals

Exception types

Try

Catch

Throw

Finally

Creating exception sub classes

**UNIT – IV**

**Introduction to JSP**

Directory Structure

Lifecycle JSP

Scripting Elements

JAR files

Servlets Life cycle of servlet

JDBC connectivity