

## **PS02CDCA33: OBJECT TECHNOLOGY**

*Three hours + 1 tutorial per week*

*Internal Marks :30*

*External Marks :70*

*Total Marks 100*

*University Examination duration 3 hrs.*

*All units carry equal weightage*

### **1. Object Modeling**

Key concepts of Object Modeling

Introduction to UML, Types of UML diagrams - structural and behavioral

Structural UML Diagrams - Class diagram, Object diagram

Behavioral UML Diagrams – Use case diagram, Activity diagram, Sequence diagram

### **2. Basic Java Programming Concepts:**

Structure of Java Program

Concept of Bytecodes and platform independence

Primitive Data Types, Variable Names, Scope, Operators, Expressions,

Control Flow Statements

Arrays

### **3. Classes, Objects and Methods:**

Class, Object, Object reference, Constructor, Constructor Overloading,

Method Overloading, Passing and Returning object form

Method, new operator, this and static keyword, finalize() method, Access

Control Modifiers, Nested class, Inner class

### **4. Inheritance, Interfaces and Exception handling**

Use of Inheritance, Inheriting Data members and Methods, constructor in inheritance, Multilevel Inheritance

Creation and Implementation of an interface, Interface reference

Introduction to the Concept of Exception Handling

### **Reference Books :**

1. Patrick Naughton and Herbert Schildt, The Complete Reference Java 2, Seventh, Tata McGraw Hill Pub., 2007
2. Ram Baugh J., etc., Object Oriented Modeling and Design, Prentice Hall of India, 1996.
3. Mary Campione, Kathy Walrath and Alison Huml, Java Tutorial, third edition, Addison Wesley Pub., 1998.