SavitribaiPhule Pune University

T.Y.B.Sc. (Computer Science) - Sem – V

Course Type: DSEC - III Course Code: CS - 359

Course Title: Practical Course based on CS - 355

Teaching Scheme	No. of Credits	Examination Scheme
5 Lect / week	2	IE: 15 marks
Batch Size: 12		UE: 35 marks

Course Objectives:

Covers the complete scope of the syllabus.

- 1. Bringing uniformity in the way course is conducted across different colleges.
- 2. Continuous assessment of the students.

Course Outcomes:

- 1. Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs.
- 2. Read and make elementary modifications to Java programs that solve real-world problems.
- 3. Validate input in a Java program.

Guidelines:

Operating Environment:

- **Operating system :** Linux
- **Editor**: Anylinux based editor like vi, gedit and Use of IDE Eclipse etc.
- Compiler : javac

Submission:

Each assignment will be assessed on a scale of 0 to 5 as indicated below.

- Not done 0
- Incomplete 1
- Late Complete 2
- Needs improvement 3
- Complete
- Well Done 5

Assessment:

Easy: All exercises are compulsory. Medium: All exercises are compulsory.

List of Assignments:

Assignment 1 : Java Tools and IDE, Simple java programs [Slot – 1]

Introduction to the java environment

Use of java tools like java, javac, jdb and javadoc

Defining simple classes and creating objects.

Assignment 2 : Array of Objects and Packages [Slot – 2]

Defining a class.

Creating an array of objects.

Creating a package.

Assignment 3: Inheritance and Interfaces [Slot - 2]

To implement inheritance in java.

To define abstract classes.

To define and use interfaces and Functional Interface.

Assignment 4 : Exception And File Handling [Slot – 2]

Demonstrate Exception Handling Mechanism in Java.

Use of try, catch, throw, throws ,finally blocks

Defining User defined Exception classes.

Creation of files and demonstration of I-O operations

Assignment 5 : GUI Designing, Event Handling [Slot – 5]

To demonstrate GUI creation using Swing Package and Layout managers.

To understand Event handling mechanism in Java.

Using Event classes, Event Listeners and Adapters