GUJARAT UNIVERSITY

K. S. SCHOOL OF BUSINESS MANAGEMENT
[Five Years' (Full-time) Integrated Degree Course]

Semester-5 [M.Sc. (CA & IT)]

Subject Code: - KS_C_CC-357
Subject Name: - Implementation Object Oriented Programming with JAVA
                (Practical on KS_C_CC-355)
Course Credit: - 3

Objective:
The objective of this course is to understand the concept of Object oriented programming in core java. Establish Strong understating of object oriented programming approach using core java.

Unit No.	Course Content	Weight-age (%)
1	- Steps for setting up environment variable - Implement Practical for Core java using various data types - Simple Program for Core Java using Class and object - Simple Program for core java using scope of variable and operator - Implement practical for core java using Type Conversion and Casting - Program for Automatic Type Promotion in expressions - Program based on Operator Precedence - Programs for Selection Statements such as if and switch. And looping such as do, do…while, while, for And Jump Statements-break, continue - Programs for Methods and static Method and constructor.	**(20%)**
2	- Program based on default constructor, Parameterized constructor, multiple constructor and dynamic constructor - Program for Method overloading, Constructor Overloading, Reference Variables, And Access Modifier. - Program for Array Handling function - Program for String Handling function - Program based on String Handling Using String Buffer Class. - Program for Class Inheritance (such as single Inheritance, multi level inheritance) . - Program for Polymorphism, Abstraction through Abstract Classes using Final Modifier, - Program for Concept of Interface and implementation of multiple Inheritance - Program for Creating Packages, Adding Classes into Package	**(20%)**

3	• Simple Practical with exception with try and catch block • More Practical for try, catch, throw, throws, • Demonstrate the concept of Multi Threading • Practical for Thread Priorities, Synchronization, Inter-thread communication • Practical for wrapper classes And Autoboxing\Unboxing • Demonstration for concept of Annotation • Practical programme for collection interface	**(20%)**
4	• Program based on I\O Basic • Program based on Reading Console Input • Program based on Reading file and working with file • Demonstrate the stream classes • Demonstrate Applet classes • Demonstration for simple applet practical display method • Practical for Applet and HTML with together • Practical for based on the generics.	**(20%)**
5	• Program based on Graphics and Text • Program for demonstration of color, paint method, font, Exploring Text and graphics • Program based Working with all controls such as Labels, Buttons, Check Boxes and Check, Box Groups, Choice Controls, Lists, Scroll Bars, Text Field and Text Area Controls • Program based on Different types of Layouts, Menu bar, Dialog Boxes and File Dialog • Program for event handling	**(20%)**

Recommended Practical Scheme: 3 hrs of supervised lab per week

Assignment: Minimum 3 Assignment

Main Reference Books:
1. Java The Complete Reference
   By Herbert Schildt, TMH Publication, 8th Edition

Reference Books:
1. Teach Yourself JAVA
   By Josheph O'Neil & Herb Schildt, Tata McGrow Hill
2. Core Java: An Integrated Approach
   By Dr. R Nageswara Rao,1st edition, dreamtechh press
3. Programming with JAVA: A printer
   By Balagurusamy, 2nd Edition, Tata McGrow Hill
4. Programming in java
   By sachin malhotra & saurabh choudhary, oxford press