

SEMESTER- V

COURSE CODE :- **C 11**
COURSE TITLE :- **PROGRAMMING IN JAVA**
CREDIT :- **4**

Marks distribution

Full Marks: 20 (MSE) + 80 (ESE) = 100 Times: 3 hrs

Pass Marks: 45

This paper consists of 70 marks and divided into two groups:

Group-A: Objective questions (Compulsory) : 1 x 10 = 10

Group-B: Descriptive questions (6 out of 9 questions) : 7 x 10 = 70

Total = 80

The questions must cover the entire syllabus with equal distribution of marks as far as practicable.

Module 1: Introduction to Java: History of Java, features of Java, types of Java programs. JDK Tools: Javac compiler, Java interpreter, applet viewer, Java tools, Javap disassemble, Javadoc Tool, JavahTool, Java keywords,

Module 2: Data types in Java, Variable naming conventions, Initializing variables, literals, operators, type conversion, construct, looping construct, Arrays and vectors.

Module 3: Classes and objects: Declaring classes, creating objects, declaring objects, declaring methods, passing arguments to methods,

Module 4: Constructors, access specifiers (public, private, protected, Default), modifiers, the Method Overloading, Method Overriding, Garbage collection (Introduction).

Module 5: Inheritance: Introduction to Inheritance, Types of Inheritance Abstract class and Interface

Module 6: Introduction to threads: Threads, Single threaded and multithreaded applications, life cycle of a Thread, the current thread, the thread class, Problems in multithreading.

Module 7: Packages: Java packages, using a package, the Lang packages, the package, the creating a package.

Module 8: Applets & Applications: Applet class, Applet & HTML, Life cycle of an Applet, Graphic class (Introduction), passing parameters to Applets, Creating an application

Books Recommended:

1. Java- Complete Reference
2. Mastering Java

PRACTICAL: Programming in JAVA

Entire syllabus of java Programming