

Semester IV

Subject Name: Programming with JAVA	Duration: 4 hrs /Cycle
Subject Code: 4PGM5(2015 on)	Credit : 3
<p>Unit I: Java evolution: Java history – java features – java and internet - java environment. Overview of java language: java program structure – java statements – Implementry java program – java virtual machine – command line arguments.</p> <p>Unit II: Java fundamentals: Constants, variables and data types – operations and expressions – decision making and branching – decision making and looping.</p> <p>Unit III: Classes, objects and methods: Defining a class, adding variables – adding methods – constructors – method overloading inheritance – overriding methods, arrays, strings and vectors – creating arrays – strings – vectors – wrapper classes.</p> <p>Unit IV: Interfaces: Defining interfaces – external interfaces – implementing interfaces, packages: creating packages – using a package – adding a class to a package. Multithreaded programming – creating threads – extending the thread – stopping and blocking a thread – life cycle of a thread.</p> <p>Unit V: Applet programming : Applet life cycle – creating an executable applet – applet tag – running the applet – more about applet tag – passing parameters to applets – graphics programming – the graphics class – lines and rectangles – circle and ellipses drawing arc polygons.</p>	

Text Book: Programming with JAVA – A primer by E. Balagurusamy, 2nd edition 2001, Tata McGraw – Hill Publication.

Chapters: 2(2.1,2.2,2.4,2.6,2.9), 3(3.5,3.7,3.8,3.9,3.10),4(4.2-4.4),5(5.2-5.9),6(6.2-6.8), 7(7.2-7.4),8(8.2-8.6,8.11,8.12),9(9.2-9.7),10(10.2-10.4),11(11.5-11.8),12(12.2-12.5), 14(14.5-14.12),15(15.2-15.6).

References Books: 1. JAVA 2: The complete reference by Patrick Naughton, Herbert Schildt, 3rd edition, Osborne Publishing(1997).

2. Programming with JAVA 2 by C. Xavier, 2nd Reprint 2003, Scitech Publication.