## ADVANCED JAVA PROGRAMMING

#### INDEX:

- 1. Java Database Connectivity
  - a. JDBC Overview
  - b. Architecture
  - c. Drivers
  - d. Connection Statements
  - e. Result Sets
  - f. Examples
  - g. Test Paper
- 2. Java Servlets
  - a. Introduction to Servlet
  - b. HTTP Servlet Basics
  - c. Servlet Life Cycle
  - d. Making session and cookies in servlet
  - e. Servlet with JDBC
  - f. Servlet Methods
  - g. Examples
  - h. Test Paper
- 3. Multi Threaded Programming
  - a. Life Cycle of a Thread
  - b. Using thread methods
  - c. Thread Exception
  - d. Thread Priority
  - e. Thread Synchronization
  - f. Implementing the 'Runnable' interface
  - g. Examples
  - h. Test Paper
- 4. The Applet
  - a. Applet Basics
  - b. Applet Architecture
  - c. An Applet Skeleton
  - d. Applet Display methods
  - e. Repainting
  - f. Applet Tag
  - g. Passing parameters to Applet
  - h. Examples
  - i. Test Paper

#### 5. Java Network Programming

- a. TCP/IP Basics
- b. Network Addressing
- c. DNS Domain Name Services
- d. Ports and Sockets
- e. Client Server Programming (TCP/UDP)
- f. Introduction to RMI
- g. Object Serialization
- h. Client Server Programing using RMI
- i. Examples
- j. Test Paper

### 6. Java Server Pages

- a. Basics
- b. Directives (page, include, taglib)
- c. Scripting Elements
- d. Life Cycle of JSP
- e. JSP and Java Beans
- f. Error Handling with JSP
- g. JSP with JDBC
- h. Examples
- i. Test Paper

## 7. Java Beans and Swing

- a. Bean Concept
- b. Events in Bean
- c. Bean Customization
- d. Persistence
- e. JAR file handling
- f. Examples
- g. Test Paper

#### 8. Frameworks

- a. Basics of Structs
- b. Basics of Spring
- c. Basics of Hibernate
- d. JMS Java Mail
- e. Examples
- f. Test Paper

# 9. Java Development

- a. IDE available in Market
- b. Plug-ins
- c. Code Optimization Using tools (Find Bugs etc)
- d. Unit Testing