

**CSE-409-F**

**ADVANCED JAVA**

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3 1 0

Class Work : 50  
Exam. : 100  
Total : 150  
Duration of Exam. : 3 hrs.

**NOTE: For setting up the question paper, question no 1 will be set up from all the four sections which will be compulsory and of short answer type. Two questions will be set from each of the four sections. The students have to attempt first common question, which is compulsory, and one question from each of the four sections. Thus students will have to attempt 5 questions out of 9 questions.**

**Section A**

**CORE JAVA**

Introduction to Java, Data types, variables, operators, Arrays, Control Statements, Classes & Methods, Inheritance, Exception Handling, Multithreading, Collections, I/O streams, AVVT & Apolet Programming.

**NETWORKING**

Connecting to a Server, Implementing Servers, Sending E-Mail, Making URL Connections, Advanced Socket Programming

**Section B**

**DATABASE NETWORKING**

The Design of JDBC. The Structured Query Language, JDBC Installation, Basic JDBC Programming Concepts, Query Execution, Scrollable and Updatable Result Sets, Metadata, Row Sets, Transactions, Advanced Connection Management, Introduction of LDAP

**DISTRIBUTED OBJECTS**

The Roles of Client and Server, Remote Method Invocations, Setup for Remote Method Invocation, Parameter Passing in Remote Methods Server Object Activation, Java IDL and CCRA, Remote Method Calls with SOAP

**Section C**

**SWING**

Lists, Trees, Tables, Styled Text Components, Progress Indicators, Component Organizers

**AWT**

The Rendering Pipeline, Shapes, Areas, Strokes, Paint, Coordinate Transformations, Clipping, Transparency and Composition, Rendering Hints, Readers and Writers for Images, Image Manipulation, Printing. The Clipboard, Drag and Drop

**Section D**

**JAVABEANS COMPONENTS**

Beans, The Bean-Writing Process, Using Beans to Build an Application, Naming Patterns for Bean

Components and Events Bean Property Tubes Beaninfo Classes Property Editors Cuatomizes

**SECURITY**

Class Loaders, Bytecode Verification, Security Managers and Permissions, Digital Signatures, Code Signing, Encryption

**TEXT & REFERENCE BOOK:**

1. Core Java™ 2, Volume II-Advanced Features, 7<sup>th</sup> Edition by Cay Horetmann, Gary Cornelll Pearson Publisher, 2004
2. Professional Java Programming by Brett Spell, WROX Publication
3. Advanced Java 2 Platform, How to Program, 2<sup>nd</sup> Edition, Harvey. M. Dietal, Prentice Hall
4. Advanced Java, Gajendra Gupta , Firewall Media