

# GUJARAT UNIVERSITY

K. S. SCHOOL OF BUSINESS MANAGEMENT

[Five Years' (Full-time) Integrated Degree Course]

## Semester-6 [M.Sc. (CA & IT)]

**Subject Code: - KS\_C\_EC-361**

**Subject Name: - Advance Java**

**Course Credit: - 3**

**Objective:**

The subject and the course content will help the student to Understand the concepts of threading and thread-safe programming in Java, Write client-side Java applications using Swing, Work with XML in Java, Work with Java Web Services

Unit No.	Course Content	Weight-age (%)
1	<b>Advanced Java Swing Programming:</b> - Introduction of Swing, AWT vs. Swing, features of Swing, Look and Feel for Swing Components  <b>Swing Components :-</b> JFrame, JApplet, JPanel, JCheckBox, JRadioButton, JToggleButton, JTree, JMenu, JFileChooser, JColorChooser, Layout Managers (BoxLayout, SpringLayout), JList, JScrollPane, JSplitPane, JTabbedPane, Dialog Box  <b>2D Graphics :-</b> 2DGraphics Class (Line Style, Fill Pattern)	(20%)
2	<b>JavaBeans:</b> - The Software Component Assembly Model, Using Customize Class, Create setter and getter Methods. Create Simple Application Using JavaBean  <b>Database Programming:</b> - ODBC and JDBC Drivers, Connecting to Database with the java.sql Package, Using JDBC	(20%)
3	<b>Servlets :-</b> Introduction to Servlets, Servlet Life Cycle, Servlet based Applications, Servlet and HTML <b>JSP :-</b> Introduction to JSP, JSP implicit objects, JSP based Applications	(20%)

<b>4</b>	<p><b>XML:</b> - Introduction to XML, XML Building Block, Displaying XML, XML Parser, Introduction to DTD</p> <p><b>RMI:</b> - The RMI Architecture, RMI exceptions, Developing Applications with RMI</p>	<b>(20%)</b>
<b>5</b>	<p><b>J2EE:-</b> The J2EE Platform, The J2EE connector Architecture, J2EE Packaging and Deployment, WAR file</p> <p><b>Other Java Technologies :-</b> Introduction to Struct, MVC, struct based application, Java Message Service (JMS), Java in small memory space (PDA), Overview of Distributed Computing (CORBA, DCOM)</p>	<b>(20%)</b>

**Recommended Lecture Scheme:** Approximately 40 to 45 hours in a semester

**Recommended Practical Scheme:** Not Applicable

**Assignment:** Five assignments should be given.

**Main Reference Books:**

1. Professional Java Server Programming (a Press)  
By Allamaraju
2. Developing Java Servlets (Techmedia – SAMS)  
By James Goodwill

**Reference Books:**

1. Using Java 1.2 Special Edition ( PHI )  
By Webber
2. Java 2 Unleashed (Techmedia – SAMS)  
By Jamie Jaworski