GUJARAT TECHNOGICAL UNIVERSITY
DIPLOMA IN INFORMATION TECHNOLOGY

SEMESTER- VI

Subject Name: **ADVANCED JAVA**

Sr. No.	Subject Content	Hrs.

1	**1.0 Introduction of Web Application using JAVA tools**
	    1.1 Controls
	    1.2 Listeners
	    1.3 Handlers
		5

2	**2.0 Swing Programming**
	    2.1 Introduction
	    2.2 Event Handling Using Swing
	        2.2.1 Versions of Swing
	        2.2.2 Labels
	        2.2.3 Actions, Tool tips, Timers
	        2.2.4 The Event Dispatch Thread
	        2.2.5 Client Properties
	        2.2.6 Keyboard Shortcuts
	        2.2.7 Serialization
	        2.2.8 Borders
	        2.2.9 Icons, Cursors
	        2.2.10 Double-Buffering
	        2.2.11 The Box Container
	        2.2.12 Simple Dialogs
	        2.2.13 JFileChooser, JColorChooser
	        2.2.14 Menus
		5

3	**3.0 Database Connectivity**
	    3.1 MS-Access Connectivity
	    3.2 SQL (JDBC- ODBC) Connectivity
		5

4	**4.0 J2EE (JSP Introduction)** 4.1 JSP Architecture 4.2 JSP Action Tags 4.3 JSP Declaratives 4.4 Basic JSP Scriptlets	6
5	**5.0 JSP Connectivity** 5.1 Retrieving Data posted to a JSP file from HTML file 5.2 JSP Session 5.3 JSP Cookies 5.4 Implement Java Script with JSP 5.5 Accessing Database from JSP	8
6	**6.0 Servlets** 6.1 Servlets Overview 6.2 Introduction to Java Servlets 6.3 Installing configuring and running Servlet 6.4 Methods of Servlet 6.5 Life Cycle of Servlet 6.6 Features of Servlet 2.5 6.7 Advantages of Java Servlets 6.8 Advantages of Java Servlets over CGI 6.9 Writing Basic Program in Servlet 6.10 Get And Post Method of Http 6.11 Simple Counter, Holistic Counter In Servlet	8
7	**7.0 Accessing Database Using Servlet** 7.1 Inserting Data In Database table using Statement 7.2 Retrieving Data from the table using Statement Inserting data from the HTML page to the database 7.3 Retrieving Data from the table using Prepared Statement 7.4 Deleting Rows From Table	5
	Total	42

Laboratory Experiences:

Student should write programs on the basic of prescribed curriculum of this Course. It should include the following.

1. Developing Desktop Application using different Java Tools.
2. Perform different event Handling using swing Programming.
3. Perform different operation (Add, Delete, and Update) on Ms-Access Database using OLEDB Connectivity.
4. Perform different operation (Add, Delete, and Update) on SQL Database using JDBC-ODBC Connectivity.
5. Create different WebPages using JSP tags.
6. Accessing Database from JSP.
7. Create different WebPages using Servlets.
8. Accessing Database using Servlets.

Reference Books:

1. The complete Reference Java 2 By -Parick Naughton, Herbert Schildt

2. Programming with Java By E Balaguruswamy