GUJARAT TECHNOLOGICAL UNIVERSITY
COMPUTER ENGINEERING
B. E. SEMESTER: VII

Subject Name: **Advance Java Technology**
Subject Code: **170703**

Teaching Scheme				Evaluation Scheme			
Theory	**Tutorial**	**Practical**	**Total**	**University Exam (E)**		**Mid Sem Exam (Theory) (M)**	**Practical (Internal)**
				Theory	**Practical**		
3	0	2	5	70	30	30	20

Sr. No.	Course Contents	Total Hrs
1.	Introduction To Swing, MVC Architecture, Applets, Applications and Pluggable Look and Feel, Basic swing components : Text Fields, Buttons, Toggle Buttons, Checkboxes, and Radio Buttons	06
2.	Java database Programming, java.sql Package, JDBC driver types, java beans	06
3.	Network Programming With java.net Package, Client Programs And Server Programs, Content And Protocol Handlers	06
4.	RMI architecture, RMI registry, Writing distributed application with RMI, Naming services, Naming And Directory Services, Overview of JNDI, Object serialization and Internationalization	10
5.	J2EE architecture, Enterprise application concepts, n-tier application concepts, J2EE platform, HTTP protocol, web application, Web containers and Application servers	04
6.	Server side programming with Java Servlet, HTTP and Servlet, Servlet API, life cycle, configuration and context, Request and Response objects, Session handling and event handling, Introduction to filters with writing simple filter application	08
7.	JSP architecture, JSP page life cycle, JSP elements, Expression Language, Tag Extensions, Tag Extension API, Tag handlers, JSP Fragments, Tag Files, JSTL, Core Tag library, overview of XML Tag library, SQL Tag library and Functions Tag library	10

8.	Introduction to Hibernate, Hibernate Architecture, O/R Mapping in Hibernate	04

Text Books:

1. Java 6 Programming, Black Book, dreamtech
2. Java Server Programming, Java EE6 (J2EE 1.6), Black Book, dreamtech
3. Java Programming Advance Topics, Joe Wigglesworth and Paula McMillan, Cengage Learning

Reference Books:

1. Professional Java Server Programming, a! Apress
2. Core Java, Volume II – Advanced Features, Eight Edition, Pearson
3. Unleashed Java 2 Platform, Sams Techmedia
4. The Complete Reference J2EE, Keogh, McGrawHill
5. Java EE 5 for beginners, Bayross and Shah, SPD
6. JDBC 3 Java Database Connectivity, Bernand Van Haecke, Wiley-dreamtech
7. Java Server Pages for Beginners, Bayross and Shah, SPD
8. Java Servlet Programming, Jason Hunter, SPD (O'Reilly)