Faculty of Engineering & Technology
KAKATIYA UNIVERSITY, WARANGAL-506009
Department Computer science &Engineering

B. Tech. (CSE) V SEMESTER

Professional Elective – I

ADVANCED JAVA(PE3104CS)

Teaching Scheme				Examination Scheme
L	**T**	**P**	**C**	Internal Marks :30
3	1	0	4	ExternalMarks:70

UNIT –I

Swings, JavaFX and Event Handling:
Swing: Introduction to swings, Comparison with AWT, Exploring Swing Components: JTextField, Jlabel, Swing buttons, JPasswordField, JTable, JComboBox, JList, JTree, JColorChooser, Dialogs and Swing Menus. Event Handling- The Delegation event model- Events, Event sources, Event Listeners, Event classes, Handling action ,mouse and keyboard events, Adapter classes, Inner classes, Anonymous Inner classes.
GUI programming with JavaFX: JavaFX basic concepts, JavaFX Application Structure, JavaFX Controls and Event handling.

UNIT –II

Networking and Collection frame work:
Networking: Networking API, Inet address, TCP/IP client sockets, URL, URL connection, HttpURL connection, Cookies, TCP/IP server sockets, Datagrams.
Collections Frame work: Collection Interfaces, Collection Classes: Array Class,Vector Class, Stack Class, Dictionary class, Hash table Class. accessing using iterators, working with maps, comparators.

UNIT – III

Java Database Connectivity (JDBC):
Introduction, JDBC Drivers, JDBC Architecture, JDBC Classes and Interfaces, Loading a Driver, Making a Connection, Execute SQL Statement, statement, prepared statement, callable statement, Retrieving Result, Getting Database Information, Scrollable and Updatable Resultset, Result Set Metadata.

UNIT –IV

Servlets:
Servlet: Server-Side Java, Servlet Alternatives, Servlet Strengths, Servlet Architecture, Servlet Life Cycle, GenericServlet, HttpServlet, Exploring Servlet API, Handling HTTP Requests and Responses, Passing Parameters to Servlets, Retrieving Parameters, Session Tracking, Filters.

UNIT – V

Java Server Pages(JSP):
Problem with Servlets, Life Cycle of JSP Page, JSP Processing, JSP Application Design with MVC, Setting Up the JSP Environment. JSP Directives, JSP Action elements, JSP Implicit Objects, JSP Form Processing, JSP Session and Cookies Handling, JSP Session Tracking JSP Database Access, JSP Standard Tag Libraries,JSP Custom Tag,JSP Expression Language, JSP Exception Handling, JSP XML Processing, JSTL.