PROGRAMME: B. Sc (Information technology)		Semester – V	
COURSE: ADVANCED JAVA		COURSE CODE : USIT504	
Periods per week 1 Period is 50 minutes	Lecture	5	
	Practical	3	
		Hours	Marks
Evaluation System	Theory Examination	2	60
	Theory Internal	--	40
	Practical		50

Unit-I	**Event Handling:** The delegation event model, Events, Event classes, Event Listener Interfaces, Using the Delegatiion event model, Adapter classes, inner classes **AWT :** Windows fundamentals, Working with frame windows, Control fundamentals, - Labels, Buttons, CheckBox, Radio button TextFileld, Understanding Layout Manager	**10 Lectures**
Unit-II	**Swing:** JColorChooser, JComboBox, JFileChooser, JInternalFrame, JLabel, JMenuBar, JOptionPane, JLayeredPane, JDesktopPane, JPanel, JPopupMenu, JProgressBar, JRootPane, JScrollBar, JScrollPane, JSeparator, JSlider, JSplitPane, JTabbedPane, JTable, JTableHeader, JtoolBar, JToolTip, JTree, JViewPort, JEditorPane, JTextPane, JTextArea, JTextField, JPasswordField, JButton, JMenuItem, JCheckBox-MenuItem, JRatioButton-MenuItem JCheckBox, JRadioButton, JMenu.	**10 Lectures**
Unit-III	**Introduction to servlets:** Need for dynamic content, java servlet technology, why servlets? **Servlet API and Lifecycle:** servlet API, servletConfig interface, ServletRequest and ServletResponse Interfaces, GenericServlet Class. ServletInputStream And ServletOutputStream Classes, RequestDispatcher Interface,HttpServlet Class, HttpServletRequest and HttpServletResponse Interfaces, HttpSession Interface, Servlet Lifecycle. **Working with servlets:** organization of a web application, creating a web application(using netbeans) , creating a servlet, compiling and building the web application	**10 Lectures**
Unit-IV	**JDBC:** Design of JDBC, JDBC configuration, Executing SQL statement, Query Execution, Scrollable and updatable result sets, row sets, metadata, Transaction. **JSP:** Introduction, disadvantages, JSP v/s Servlets, Lifecycle of JSP, Comments, JSP documents, JSP elements, Action elements, implicit objects, scope, characterquoting conventions, unified expression language.	**10 Lectures**
Unit-V	**Java server Faces :** Need of MVC , what is JSF?, components of JSF, JSF as an application, JSF lifecycle, JSF configuration, JSF web applications (login form, JSF pages) **EJB:** Enterprise bean architecture, Benefits of enterprise bean, types of beans, Accessing beans , packaging beans, creating web applications, creating enterprise bean, creating web client, creating JSP file, building and running web application.	**10 Lectures**
Unit-VI	**HIBERNATE:** Introduction, Writing the application, application development approach, creating database and tables in MySQL, creating a web application, Adding the required library files, creating a java bean class, creating hibernate configuration and mapping file, adding a mapping resource, creating JSPs. **STRUTS:** Introduction, Struts framework core components, installing and setting up struts, getting started with struts.	**10 Lectures**