

Paper Code: BCADSC 5.1

Paper title: Advanced Java

Teaching Hours – 5 hrs/week

Total Teaching Hours: 60 Hrs.

Marks: Th-80+IA-20

Credits: 4

UNIT I

Event Handling: Event, Event Source, Event Classes, Event Listener interface, Examples, Handling Windows Events, Adapter Classes, Inner classes. **12 Hrs**

UNIT II

Swing: Introduction to JFC (Java Foundation Classes), Swing, Swing Features, JComponent, JApplet, JFrame, JPanel, JTextField, JButtons, JCheckBox and JRadioButton, JComboBox, JScrollPane, JList. **12 Hrs**

UNIT III

JDBC Architecture: Introduction to JDBC, Java and JDBC, JDBC VS ODBC, JDBC DRIVER MODEL, JDBC Driver Types, Types of Driver Managers, JDBC Connection process, Statement object, preparedStatement object, operations on ResultSet (Read, insert, update and delete), transaction processing, Metadata, ResultSet Metadata, Data types. **12 Hrs**

UNIT IV

Servlet Interaction & Advanced Servlets, Life cycle of Servlet, Java Servlet Development Kit, javax.servlet package, Reading Servlet Parameters, Reading Initialization Parameters, The javax.servlet.http Package, Handling HTTP. Java Server Pages(JSP): JSP, JSP Tags, Request string, Cookies, User session, Session object. **12 Hrs**

UNIT V

Networking Basics, InetAddress, TCP/IP Client-Server Socket, URLConnection, HTTPURLConnection, Datagram, Introduction To EJB, Types of EJB. **12 Hrs**

References:

1. Jim Keogh, J2EE: The complete Reference, McGrawHill
2. Herbert Schildt, The Java 2 : Complete Reference, Fourth edition, TMH
3. <https://docs.oracle.com/javase/tutorial/>

Additional Reading:

1. H. M. Deitel, P. J. Deitel, Java: how to program, 5th edition, Prentice Hall of India.
2. Y. Daniel Liang, Introduction to Java programming, 9th Edition, Pearson education.
3. Cay S Horstmann, Fary Cornell, Core Java 2, Volume – I&II, Sun Microsystems Press