LESSON PLAN: Prepared by: Prof. Chethana R Murthy, Dept of ISE, RVCE JAVA & J2EE (Global Elective)

WEEK NO.	UNIT NO.	TOPIC	SUB-TOPIC	REMARKS
1	1	INTRODUCTION TO JAVA	Java Language introduction, Java features, why Java is important to internet, Java Language Introduction- Hello World, Lexical Issues, Java class Libraries Simple Java programs Variables, Data Types- Simple Types, Type conversion, Arrays. Operators, Flow Control-Branching, Looping, Sample programs to illustrate variables, Data Types, Type conversion, Arrays, Operators, Branching, Looping	
2	1	INTRODUCTION TO JAVA	Classes-Object References, Instance Variables, The new operator, The Dot(.) Operator, Method Declaration, Method Calling, Constructors, Sample programs to illustrate class – object, reference, new, constructors, methods Method Overloading, Inheritance, Method Overriding, Dynamic Method Dispatch, Abstract, Packages and Interfaces-Packages, Interfaces Sample programs to illustrate method overloading, overriding, inheritance, abstract, interfaces	
3	2	JAVA CLASSES	String handling- Constructors, String syntax, Character Extraction, Comparison, String Copy Modifications, Sample programs to illustrate Constructors, String syntax, Character Extraction, Comparison, String Copy Modifications, Exception Handling-Exception Types, Uncaught Exceptions, Try and catch, Multiple catch Clauses, Nested try Statements, Exception sub Classes Sample programs to illustrate Try and catch, Multiple catch Clauses, Nested try Statements	
4	2	JAVA CLASSES	Threads and Synchronization- Single Threaded Event Loop, The Java Thread Model, Thread class, Runnable Interface, Thread Priorities Sample programs to illustrate Thread class, Runnable Interface, Thread Priorities Synchronization, Inter-Thread Communication, Thread API Summary Sample programs to illustrate Synchronization, Inter-Thread Communication	
5	2	JAVA CLASSES	Utilities- Enumerations, Simple type Wrappers, runtime Sample programs to illustrate Enumerations, Simple type Wrappers, runtime Input/ Output- File, Input Stream, Output Stream, File Streams Sample programs to illustrate File, Input Stream, Output Stream, File Streams	
6	3	INTRODUCTION TO JAVA GUI	Applets: Applet Basics, Architecture, Applet Lifecycle, repaint (), update, HTML APPLET Tags Sample programs to illustrate Applet Lifecycle, repaint (), update, HTML APPLET Tags Passing parameters to Applets. AWT: AWT classes, Window fundamentals. Sample programs for Passing parameters to Applets	

7	3	INTRODUCTION TO JAVA GUI	Swings: Introduction to Swings, JApplet, JFrame and JComponent Sample programs to illustrate Swings Icons & labels, Handling Threading issues, Text Fields, Buttons. Sample programs to illustrate Icons & labels, Handling Threading issues, Text Fields, Buttons.	
8	4	J2EE AND JDBC CONCEPTS	Overview of J2EE and J2SE, J2EE best Practices Enterprise Application strategy, Enterprise Application clients, session Management Web Tier & JSP, EJB Tier	
9	4	J2EE AND JDBC CONCEPTS	The Concept of JDBC; JDBC Driver Types; JDBC Packages A Brief Overview of the JDBC process Database Connection; Associating the JDBC/ODBC Bridge with the Database JDBC/ODBC – db connectivity demonstration	
10	4	J2EE AND JDBC CONCEPTS	Statement Objects; Result Set Sample programs to illustrate Statement Objects; Result Set Transaction Processing; Metadata, Data types; Exceptions. Sample programs to illustrate Transaction Processing; Metadata, Data types; Exceptions.	
11	5	SERVLETS AND JSP	Background, The Life Cycle of a Servlet; Servlet configuration, Reading/Sending data Sample programs to illustrate Servlets Working with Cookies – Cookie class and its methods Sample programs to illustrate Cookie class and its methods	
12	5	SERVLETS AND JSP	Session Tracking- methods used in session tracking. Sample programs to illustrate methods used in session tracking Java Server Pages (JSP) installation, JSP Tags, Tomcatstarting and stopping server Sample programs to illustrate JSP	
13	5	SERVLETS AND JSP	Request String, User Sessions Sample programs to illustrate Request String, User Sessions Cookies, Session Objects Sample programs to illustrate Cookies, Session Objects	