



### Lesson Plan

**Program:** BCA **Semester:** V **Course Code:** BCA-502 **Course Name:** Java Programming and Dynamic Webpage Design

**Course Objectives**

CO1- To learn the concepts of Array, String, thread and method of Exception Handling in Java.

CO2- To learn the Applet concepts.

CO3- To describe and the concept of Networking and JDBC concepts

CO4- To learn the concepts of HTML language.

CO5- To learn the concepts of servlet and database connectivity.

CO6- To understand the concepts of JSP.

**Session Duration:** 60 minutes

**Participants:** BCA Fifth Semester Students

**Entry level knowledge and skills of students**

- i. Computer Fundamentals
- ii. Object Oriented Programming Concepts

**Equipment required in Classroom/ Laboratory/ Workshop**

- i. Projector
- ii. White Board/ Marker

**Assessment Schemes**

S. No.	Criteria	Marks (100)
1	CCSU End Term Examination	75
2	Internal Evaluation Scheme	25
2(a)	Teacher Assessment (Continuous Evaluation) (Assignment & attendance)	25
2(a)(i)	Assignment-1	10
2(a)(ii)	Assignment-2	10
2(a)(iii)	Attendance (compulsory)	5

**Course Outcomes** (starting with action-oriented observable and measurable verb)

<b>(CO1)</b>	Ability to define & implement Arrays, Strings, Vectors, Packages and Exception in Java.	<b>Understand K(2), Applying K(3)</b>
<b>(CO2)</b>	Ability to understand & implement the different concepts of applets	<b>Understand K(2), Applying K(3)</b>
<b>(CO3)</b>	Ability to implement the concepts of Networking event handling and JDB Concepts	<b>Understand K(2), Applying K(3)</b>
<b>(CO4)</b>	Able to understand & implement the concept of HTML language.	<b>Understand K(2), Applying K(3)</b>
<b>(CO5)</b>	Ability to implement server-side programs and Access database through Java programs.	<b>Applying K(3)</b>



<b>(CO6)</b>	Able to implement the knowledge of JSP.	<b>Applying K(3)</b>
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L. No.	Topics	Sub Topics	Date of implementation	Pedagogy	CO-Covered	Faculty Sign	HoD's Remark with Date
<b>Unit - 1</b>							
1.	<b>Discuss Syllabus</b>	Course Objective & Outcome		Lecture	CO-1 TO CO-6		
2.	<b>Java Programming:</b>	Introduction		Lecture	CO-1		
3.		History of Java		Lecture	CO-1		
4.		OOP Concepts		Lecture	CO-1		
5.		Java Tokens		Lecture	CO-1		
6.		Data Types		Lecture	CO-1		
7.		Operators		Lecture, Demonstration	CO-1		
8.	<b>Decision Making &amp; Branching</b>	If, If-else, else if, Nested if		Lecture, Demonstration			
9.		Switch statements		Lecture, Demonstration	CO-1		
10.	<b>Decision Making &amp; Looping</b>	For, While, do-while		Lecture, Demonstration	CO-1		
11.		Jump statements		Lecture, Demonstration	CO-1		
12.	<b>OOP Concepts</b>	Classes, Objects		Lecture, Demonstration	CO-1		
13.		Constructors, Overloading		Lecture, Demonstration	CO-1		
14.		Inheritance		Lecture, Demonstration	CO-1		
15.		Final, Abstract		Lecture, Demonstration	CO-1		
16.		Array		Lecture, Demonstration	CO-1		
17.		Strings, Vectors		Lecture, Demonstration	CO-1		
18.		Packages, Exception Handling		Lecture, Demonstration	CO-1		
19.	<b>Multithreaded programming</b>	Introduction		Lecture	CO-1		
20.		Life cycle of Thread		Lecture	CO-1		



21.		Revision Unit-1		Brainstorming, Buzz Grouping, Practice Qus.	CO-1		
22.		Discuss University Questions		Brainstorming, Buzz Grouping	CO-1		
<b>Unit - 2</b>							
23.	<b>Java applets</b>	Introduction , Life Cycle		Lecture	CO-2		
24.	<b>AWT controls</b>	Button, Labels, Combo box, list and other Listeners, menu bar		Lecture, Demonstration	CO-2		
25.	<b>String handling</b>	All String functions		Lecture, Demonstration	CO-2		
26.		Revision Unit-2		Brainstorming, Buzz Grouping, Practice Qus.	CO-2		
27.		Discuss University Questions		Brainstorming, Buzz Grouping	CO-2		
<b>Unit - 3</b>							
28.	<b>Networking</b>	Introduction		Lecture	CO-3		
29.		Datagram socket and TCP/IP based server socket, event handling		Lecture, Demonstration	CO-3		
30.	<b>JDBC</b>	Introduction , Drivers		Lecture, Demonstration	CO-3		
31.		Establishing Connection, Connection Pooling		Lecture, Demonstration	CO-3		
32.		Revision Unit-3		Brainstorming, Buzz Grouping, Practice Qus.	CO-3		
33.		Discuss University Questions		Brainstorming, Buzz Grouping	CO-3		
<b>Unit - 4</b>							
34.	<b>HTML</b>	Introduction , Comments		Lecture	CO-4		



		tag, header, text, image,					
35.		Font style, table tag, list		Lecture,Demonstration	CO-4		
36.		frameset		Lecture,Demonstration	CO-4		
37.		Revision Unit-4		Brainstorming, Buzz Grouping, Practice Qus.	CO-4		
38.		Discuss University Questions		Brainstorming, Buzz Grouping	CO-4		
<b>Unit – 5</b>							
39.	<b>Java Servlets</b>	Introduction, HTTP Servlet Basics,		Lecture	CO-5		
40.		The Servlet Lifecycle, Retrieving Information		Lecture,Demonstration	CO-5		
41.		Sending HTML Information, Session Tracking,		Lecture, Demonstration	CO-5		
42.		Database Connectivity		Lecture, Demonstration	CO-5		
43.		Revision Unit-5		Brainstorming, Buzz Grouping, Practice Qus.	CO-5		
44.		Discuss University Questions		Lecture,Brainstorming	CO-5		
<b>Unit – 6</b>							
45.	<b>Java Server Pages</b>	Introducing Java Server Pages, JSP Overview, Setting Up the JSP Environment		Lecture	CO-6		
46.		Generating Dynamic Content, Using Custom Tag Libraries		Lecture,Demonstration	CO-6		



		and the JSP Standard Tag Library					
47.		Processing Input and Output.		Lecture, Demonstration	CO-6		
48.		Revision Unit-6		Brainstorming, Buzz Grouping, Practice Qus.	CO-6		
49.		Discuss University Questions		Brainstorming, Buzz Grouping	CO-6		

**Text Books:**

1. Programming in ANSI C – by E. Balagurusamy
2. Let us C – by Yashavant P. Kanetkar
3. Java The Complete Reference by Herbert Schildt

**Reference Books:**

1. A First Course in Programming with C – by T Jeyapooan
2. Programming in C – by R.S.Salaria