SRINIVAS UNIVERSITY
COLLEGE OF ENGINEERING & TECHNOLOGY
Department Of Computer Science and Engineering
TEACHING/LESSON PLAN (EVEN Semester 2021-22)

Subject Code		19SCS43	Title	OBJECT ORIENTED CONCEPTS		Class	IV 'A'		
Prerequisites		PROGRAMMING IN C		Faculty Name		AKHILRAJ V. GADAGKAR			
Credits	4	Hours/week	L-T-P: 4-0-0	CIE Marks	50	SEE Marks	50	Total Hours	40

Course Objectives: This course will enable students to

- Learn fundamental features of object oriented language and JAVA
- Set up Java JDK environment to create, debug and run simple Java programs.
- Create multi-threaded programs and event handling mechanisms.
- Introduce event driven Graphical User Interface (GUI) programming using applets.

Course Outcomes of the Course:
On Completion of this Course the Student was able to,

CO id	Course Outcome
CO1	Explain the object-oriented concepts and JAVA.
CO2	Develop computer programs to solve real world problems in Java.
CO3	Develop simple GUI interfaces for a computer program to interact with users, and to understand the event-based GUI handling principles using Applets.
CO4	Understand the concepts of importing of packages and exception handling mechanism.
CO5	Explain String Handling examples with Object Oriented concepts.

CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3				2				2			2
CO2	3	2	2		2				2			2
CO3	3	2	2		2				2			2
CO4	3	2	2		2				2			2
CO5	3	2	2		2				2			2

Lesson/Teaching Plan of the Course:

Hour No.	Plan Date	Actual Date	Topic to be covered	CO Mapping	Mode of Delivery	Text/ Reference book
1	22/03/2022		A Review of structures	CO1	Chalk & Talk	T1
2	25/03/2022		Procedure–Oriented Programming system	CO1	Chalk & Talk	T1
3	25/03/2022		Object Oriented Programming System	CO1	Chalk & Talk	T1
4	26/03/2022		Comparison of Object Oriented Language with C, Console I/O, variables and reference variables	CO1	Chalk & Talk	T1
5	29/03/2022		Function Prototyping, Function Overloading	CO1	Chalk & Talk	T1
6	01/04/2022		Class and Objects: Introduction	CO1	Chalk & Talk	T1
7	01/04/2022		member functions and data	CO1	Chalk & Talk	T1
8	05/04/2022		objects and functions	CO1	Chalk & Talk	T1

9	08/04/2022		objects and arrays	CO1	Chalk & Talk	T1
10	08/04/2022		Namespaces, Nested classes, Constructors, Destructors	CO1	Chalk & Talk	T1
11	09/04/2022		Java's magic: the Byte code	CO2	Chalk & Talk	T2, R6
12	12/04/2022		Java Development Kit (JDK)	CO2	Chalk & Talk	T2, R6
13	16/04/2022		The Java Buzzwords	CO2	Chalk & Talk	T2
14	26/04/2022		The Java Buzzwords	CO2	Chalk & Talk	T2
15	29/04/2022		Object-oriented programming;	CO2	Chalk & Talk	T2
16	29/04/2022		Simple Java programs.	CO2	Chalk & Talk	T2, R6
17	30/04/2022		Simple Java programs.	CO2	Chalk & Talk	T2, R6
18	06/05/2022		Data types,variables	CO2	Chalk & Talk	T2, R6
19	06/05/2022		arrays, Operators,	CO2	Chalk & Talk	T2, R6
20	07/05/2022		Control Statements.	CO2	Chalk & Talk	T2, R6
21	10/05/2022		Classes: Classes fundamentals; Declaring objects;	CO3	Chalk & Talk	T2
22	13/05/2022		Constructors	CO3	Chalk & Talk	T2
23	13/05/2022		this keyword, garbage collection.	CO3	Chalk & Talk	T2
24	14/05/2022		Inheritance: inheritance basics,	CO3	Chalk & Talk	T2
25	17/05/2022		using super,	CO3	Chalk & Talk	T2
26	20/05/2022		creating multi-level hierarchy,	CO3	Chalk & Talk	T2
27	20/05/2022		method overriding.	CO3	Chalk & Talk	T2
28	21/05/2022		Exception handling: Exception handling in Java.	CO3	Chalk & Talk	T2, R6
29	24/05/2022		Packages, Access Protection, Importing Packages,	CO3	Chalk & Talk	T2, R6
30	27/05/2022		Interfaces.	CO3	Chalk & Talk	T2, R6
31	27/05/2022		Multi-Threaded Programming: What are threads?	CO4	Chalk & Talk	T2, R6
32	28/05/2022		How to make the classes threadable	CO4	Chalk & Talk	T2, R6
33	31/05/2022		Extending threads	CO4	Chalk & Talk	T2, R6
34	03/06/2022		Implementing runnable	CO4	Chalk & Talk	T2, R6
35	03/06/2022		Synchronization; Changing state of the thread	CO4	Chalk & Talk	T2, R6
36	04/06/2022		Bounded buffer problems, read-write problem, producer consumer problems.	CO4	Chalk & Talk	T2
37	07/06/2022		Event Handling: Two event handling mechanisms	CO4	Chalk & Talk	T2
38	10/06/2022		The delegation event model; Event classes	CO4	Chalk & Talk	T2

39	10/06/2022		Event classes; Sources of events; Event listener interfaces; Using the delegation event model	CO4	Chalk & Talk	T2
40	11/06/2022		Adapter classes; Inner classes.	CO4	Chalk & Talk	T2
41	14/06/2022		Introduction, Two types of Applets	CO5	Chalk & Talk	T2, R6
42	17/06/2022		Applet basics; AppletArchitecture	CO5	Chalk & Talk	T2, R6
43	17/06/2022		An Applet skeleton; Simple Applet display methods	CO5	Chalk & Talk	T2
44	18/06/2022		Requesting repainting;Using the Status Window	CO5	Chalk & Talk	T2, R6
45	18/06/2022		The HTML APPLET tag; Passing parameters to Applets	CO5	Chalk & Talk	T2, R6
46	21/06/2022		getDocumentbase() and getCodebase(); AppletContext and showDocument(); The AudioClip Interface; The AppletStubInterface;Output to the Console.	CO5	Chalk & Talk	T2, R6
47	21/06/2022		Swings: Swings: The origins of Swing; Two key Swing features; Components and Containers	CO5	Chalk & Talk	T2
48	24/06/2022		The Swing Packages; A simple Swing Application; Create a Swing Applet	CO5	Chalk & Talk	T2
49	24/06/2022		Jlabel and ImageIcon; JTextField;The Swing Buttons	CO5	Chalk & Talk	T2
50	25/06/2022		JTabbedpane; JScrollPane; JList; JComboBox; JTable	CO5	Chalk & Talk	T2

TEXT/REFERENCE BOOKS:

T/R	BOOK TITLE/AUTHORS/PUBLICATION
T1	SouravSahay, Object Oriented Programming with C++ , Oxford University Press,2006 (Chapters 1, 2, 4)
T2	Herbert Schildt, Java The Complete Reference, 7th Edition, Tata McGraw Hill, 2007. (Chapters 1, 2, 3, 4, 5, 6, 8, 9,10, 11, 21, 22, 29, 30)
R1	Mahesh Bhave and Sunil Patekar, "Programming with Java", First Edition, Pearson Education,2008, ISBN:9788131720806
R2	Herbert Schildt, The Complete Reference C++, 4th Edition, Tata McGraw Hill, 2003.
R3	Stanley B. Lippmann, JoseeLajore, C++ Primer, 4th Edition, Pearson Education, 2005.
R4	Rajkumar Buyya, S Thamarasi Selvi, Xingchen Chu, Object oriented Programming with java, Tata McGrawHill education private limited.
R5	Richard A Johnson, Introduction to Java Programming and OOAD, CENGAGE Learning.
R6	E Balagurusamy, Programming with Java A primer, Tata McGraw Hill companies.

Faculty Member **HOD**

Date: