

JAVA PROGRAMMING

Course Code	20SA8552	Year	III	Semester(s)	I
Course Category	Skill Oriented	Branch	EEE	Course Type	Lab
Credits	2	L-T-P	1-0-2	Prerequisites	Programming with C
Continuous Internal Evaluation:	-	Semester End Evaluation:	50	Total Marks:	50

Course Outcomes	
Upon successful completion of the course, the student will be able to	
CO1	Apply object oriented principles/ Java constructs for solving problems (L3)
CO2	Implement programs as an individual on different IDE/ online platforms. (L3)
CO3	Develop an effective report based on various programs implemented. (L3)
CO4	Apply technical knowledge for a given problem and express with an Effective oral communication. (L3)
CO5	Analyze outputs using given constraints/test cases. (L4)

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:High, 2: Medium, 1:Low)														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3											2	2	2
CO2	3													
CO3	3								3	3				
CO4	3													
CO5		2												
CO6	3											2	2	2

Syllabus		
Expt No.	Contents	Mapped CO
1	Implement Java Programs by using Conditional Statements, Switch and loops with suitable examples.	CO1,CO2,CO3,CO4,CO5
2	Develop Java Programs Using 1D Arrays and 2D arrays.	CO1,CO2,CO3,CO4,CO5
3	Use String, String Buffer and String Tokenizer classes to develop Java programs.	CO1,CO2,CO3,CO4,CO5
4	Implement the concept of static variables, static methods and static block.	CO1,CO2,CO3,CO4,CO5
5	Implement the concept of instantiation of objects using Classes.	CO1,CO2,CO3,CO4,CO5

6	Implement reusability concept through inheritance.	C01,C02,C03,C04,C05
7	Implement concept of Polymorphism using method Overloading and overriding.	C01,C02,C03,C04,C05
8	Develop Java programs using Abstract Class to achieve Partial abstraction.	C01,C02,C03,C04,C05
9	Use interfaces to develop Java programs with complete Abstraction.	C01,C02,C03,C04,C05
10	Create a package and access members from the package to Avoid naming conflicts.	C01,C02,C03,C04,C05
11	Implement Exception handling to build robust programs.	C01,C02,C03,C04,C05
12	Develop Java programs using Multithreading for process Synchronization.	C01,C02,C03,C04,C05
13	Implement various data structures using Collection Framework.	C01,C02,C03,C04,C05

Learning Resources	
Text Books	
1. Java - The Complete Reference, Herbert Schildt, Ninth Edition, 2014, McGraw-Hill.	
2. Introduction to Java Programming 10 th Edition by Y. Daniel Liang Pearson.	
e-Resources & other digital material	
1. https://www.javatpoint.com/java-tutorial	
2. http://www.learnjavaonline.org/	
3. http://vtc.internshala.com/signup/course_details2.php?course=java101	
4. https://nptel.ac.in/courses/106/105/106105191/	
5. https://www.udemy.com/course/java-tutorial/	
6. https://www.decodejava.com/	
7. https://www.codecademy.com/learn/learn-java	
8. https://www.w3schools.com/java/	