

SWARNANDHRA

COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956
Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada
Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF INFORMATION TECHNOLOGY

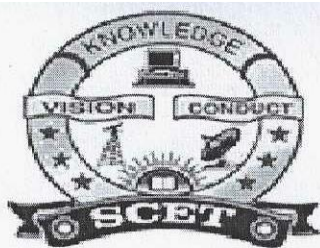
LAB TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
23CS4L02	OBJECT-ORIENTED PROGRAMMING THROUGH JAVA LAB	4	CSE-DS-A	3 Periods	2025-2026	10-12-2025

COURSE OUTCOMES

1	Apply basic Java programming constructs to solve computational problems.
2	Design programs using object-oriented concepts such as inheritance, abstraction, and polymorphism.
3	Develop Java programs using exception handling and multithreading for reliable execution.
4	Build Java applications that connect to and manage databases using JDBC.

Experiment Number	Experiment	Contact Hours
1	a. Write a JAVA program to display default value of all primitive data type of JAVA. b. Write a java program that display the roots of a quadratic equation $ax^2+bx=0$. Calculate the discriminate D and basing on value of D, describe the nature of root.	3
2	a. Write a JAVA program using StringBuffer to delete, remove character. b. Write a JAVA program to implement class mechanism. Create a class, methods and invoke them inside main method.	3
3	Write a JAVA program to search for an element in a given list of elements using binary search mechanism.	3
4	a. Write a JAVA program implement method overloading. b. Write a JAVA program to implement constructor. c. Write a JAVA program to implement constructor overloading.	3
5	a. Write a JAVA program to implement Single Inheritance. b. Write a JAVA program to implement multi-level Inheritance. c. Write a JAVA program for abstract class to find areas of different shapes.	3



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6	a. Write a JAVA program give example for "super" keyword. b. Write a JAVA program to implement Interface. What kind of Inheritance can be achieved? c. Write a JAVA program that implements Runtime polymorphism	3
7	a. Write a JAVA program that describes exception handling mechanism b. Write a JAVA program Illustrating Multiple catch clauses	3
8	a. Write a JAVA program for creation of Java Built-in Exceptions b. Write a JAVA program for creation of User Defined Exception	3
9	Write a JAVA program that creates threads by extending Thread class. First thread display "Good Morning "every 1 sec, the second thread displays "Hello "every 2 seconds and the third display "Welcome" every 3 seconds, (Repeat the same by implementing Runnable) b) Write a program illustrating is Alive and join () c) Write a Program illustrating Daemon Threads.	3
10	a. Write a java program that connects to a database using JDBC b. Write a java program to connect to a database using JDBC and insert values into it. c. Write a java program to connect to a database using JDBC and delete values from it	3
CUMULATIVE PROPOSED PERIODS		30

	Name	Signature with Date
i. Faculty	Mrs. R UMA ARUNA DEVI	R. Uma Aruna Devi 10/12/25
ii. Module Coordinator	Mr.A.S.V.N. BHOGESH	A.S.V.N. Bhogesh 10/12/25
iii. Programme Coordinator	Dr.RVVS PRASAD	Dr.RVVS Prasad 10/12/25

Principal